Infor VISUAL System Administrator Guide

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Chapter 1: Set Up and Maintenance

Only qualified representatives of Infor should install VISUAL on your system. When installation is complete, you can begin to set up VISUAL to meet your company's needs.

This chapter provides information on setting up and maintaining the system, setting up icons, setting application preferences, and updating the executables.

Entering License Keys

A license key is similar to a serial number. It allows licensed users to enjoy all the benefits of the modules they have purchased.

For added security, the license key is authenticated by encryption.

Licensing is mandatory. VISUAL does not operate without valid licenses, except in the case of a 30 day temporary license. To enter a license number for your system, or any of its components:

1   Select **Admin**, **Enter New License Key**.

2   In the Product section, select the appropriate product option button.

3   In the License Key data field, enter the supplied license key to enable the product.

4   Click **Ok** to commit the license number.

   If the license key is not valid, a warning message is displayed.

5   Exit and restart VISUAL to finish applying the license code.

Loading and Reading Hasp Keys

A Hasp device is a piece of hardware that plugs into your server and provides your company with license protection. You can read and load "Hasp Keys" using the Hasp buttons in the Enter License key dialog box.

To change Hasp Keys:

1   Select **Admin**, **Enter New License Key**.

2   Click **Read Hasp**.

   The Hasp Key is read and a key file called hasp.c2v is created.

3   E-mail the hasp.c2v file to your Infor contact.

4   When Infor sends you a new hasp file, copy it to the same location as the one VISUAL created for you.

5   Click **Load Hasp**.

   The new Hasp Key is loaded.

Displaying Licensed Components

Use the Display License to view the components that you are currently licensed to use. This feature is available to system administrators only.

Select **Admin**, **Display License**. In the header, this information is displayed:

Release – The release number of the version of VISUAL you are using is inserted.

Database – The database engine you use is inserted.

Maximum Sites/Used Sites – The maximum number of sites you are licensed to use and the number you are currently using are inserted.

All available components are listed. The check box next to the component is selected if you are licensed to use the component. Some of the components, such as VISUAL Financials Global Edition, have their own license number. Other components, such as VISUAL Enterprise Aerospace & Defense® and Project, are enabled based on your VISUAL license. These check boxes are not editable.

The available components are:

HWKey – HWKey enables you to use a Hasp device that provides your company with license protection.

VISUAL MRP – VISUAL MRP® modules generate planned demand and supply orders for a part based on the part's Order Policy, demand, and master production schedule (for a master scheduled part). You can then firm and release the orders just as you would purchase orders and work orders.

Traceability – Lot and Serial Traceability provides full visibility to the location and sourcing of products and their sub-components, raw materials or ingredients, and source suppliers.

Piece Track – Piece Track (also known as Dimensional Inventory) provides an additional level of visibility into the quantity and location of inventory items in the shop. Instead of seeing just the total quantity of the item, you have the ability to see the total quantity broken down by its various dimensional sizes. Dimensional Inventory also gives you the ability to purchase and receive items, enter material requirements, and issue, return, and adjust items by specifying the number of pieces of material, what the dimensions of those pieces are, and their location.

Barcode Wedge – Barcode Wedge modules provide you the ability to scan work order traveller barcodes using wedge devices.

ECN – Engineering Change Notice allows you to manage engineering changes to your documents, parts, and bills of manufacture. While the engineering change process usually varies from company to company, there are some elements that are common to all companies. All ECNs contain a problem statement or subject for the change, a description of what work needs to be done, and who needs to be notified of the completed changes.

Configurator (MPC) – The Product Configurator allows your sales force to customize and configure your products, then quickly and easily create quotes and customer orders within VISUAL.

Multi Site/Entity – If you are licensed to use Multi Site/Entity, you can set up multiple manufacturing entities in your database. Each entity can have multiple sites. Refer to *Infor VISUAL Multi-entity and Multi-site User's Guide*.

SPC – Statistical Process Control (SPC) is a statistical method used to determine if measured variation observed in the output of a process is what would be expected if there are no outside causes affecting that process. SPC is a tool to help recognize when an outside cause is affecting the output of a process by applying statistical tests on samples from the process output.

VDIU – The Data Import Utility provides a Bill of Material and Part import interface to VISUAL for third-party applications.

Intrastat – Intrastat allows you to track international shipments and receipts of goods and helps you to create Intrastat reports.

Project – The Project modules offer integrated data for capturing costs, maintaining contracts and projects, handling long lead-times, and delivering on-time complex projects.

Adavanced Material Planning – Provides planning capabilities for both real and planned parts. User-defined color-coded demand fences allow you to view the availability of parts for both real and forecasted demand within user-specified time periods by manipulating Planning Calendars.

BTS – VISUAL Barcode Tracking System allows you to record and monitor scanned transactions in real time.

Barcode Label Print – Barcode Label Print allows you to print labels containing barcodes.

Plant Maintenance – Plant and Equipment Maintenance improves your ability to schedule routine internal maintenance and generates revenue for your company by allowing you to maintain customer service agreements and schedule preventative maintenance tasks for customer-purchased products.

VISUAL Financials – VISUAL Financials® is a powerful suite of applications that enables your financial organization to better manage all of its financial and cash management requirements.

Payroll – VISUAL Payroll is a sophisticated payroll processing and reporting system. It is fully integrated with other VISUAL applications. Information can easily be transferred between these applications, eliminating the need for repetitive data entry and ensuring the integrity of your data.

VISUAL DCMS – VISUAL DCMS® offers an advanced Radio Frequency-enabled Warehouse Management System (WMS). It is an execution-based "4 walls" application designed to optimize inventory flows, labor planning, and resource management in the warehouse.

VISUAL Quality – VISUAL Quality® is not compatible with this release. Use the Infor Quality Management solution to address quality assurance issues in specific areas of your operations. You can establish, track, and manage every engineering activity and supply chain expectation while supporting business growth and profitability goals.

EDI – This optional module works with your EDI software to import and export data between your VISUAL database and the EDI application.

VM Lite – Infor ERP VISUAL for smaller manufacturers. This feature is no longer available.

UPS Connect – VISUAL Shipper Connect™ uses the United Parcel Service On-Line®Worldship® program to generate shipping charges and tracking numbers for your UPS shipments.

VFIN – VISUAL Financials Global Edition is designed specifically to meet the requirements of companies operating multiple entities, divisions, sites, and subsidiaries around the world. It is a transaction-based business management tool that helps companies effectively handle customer and supplier relationships, as well as comparatively monitor business performance across various levels of an organization.

VISUAL Enterprise Aerospace & Defense – Defense provides features for defense contractors.

VISUAL Designlink – VISUAL DesignLink® works with applications such as AutoCAD® from Autodesk to seamlessly integrate your engineering operations with your manufacturing operations. This allows enterprises to maintain and retrieve engineering and manufacturing information from a single, accessible source, improving communication, eliminating data entry, and ensuring consistency.

VISUAL Human Resources – VISUAL Human Resources® is a comprehensive data management and reporting tool. It maintains vital data about applicants and employees and provides numerous standardized reports. Because of dynamic integration between VISUAL HR® and VISUAL Payroll, the shared data between the two applications eliminates the need for repetitive data entry, and ensures consistency and accuracy.

VISUAL Order Management – VISUAL Order Management® capability allows companies to manage a large volume of customer orders and meet varied fulfillment objectives. The application helps users manage customer order allocation and new product deployment planning throughout the supply chain. Order Management helps you achieve optimized fulfillment, rapid order processing cycles, cost-effective sourcing of inventory to customer orders, and increased revenue with capabilities such as substitution, cross-selling items, and Value Added Services.

VISUAL Easy Lean – VISUAL DBR® (Drum-Buffer-Rope) and VISUAL Easy Lean are application for production planning inspired by the Theory of Constraints (TOC) business management philosophy developed by Dr. Eli Goldratt. Using time buffers to accommodate occurrences, such as last-minute customer requests, unreliable vendors, and absent employees, the system works to ensure customers receive products on-time.

VISUAL Time and Attendance – VISUAL Time & Attendance® lets you track information such as hourly workers, pieceworkers, and both exempt and non-exempt salaried employees.

VISUAL Manufacturing Named Users – If this check box is selected, then the system bases the number of current users on the number of user IDs created in the database. For example, if you have a Named User license for 100 users, then you can have up to 100 user IDs in your database. If the check box is clear, then the system limits the number of users that can be logged in concurrently. For example, if you have a concurrent user license for 100 users, you can create as many user IDs as you like, but only 100 of them can be logged in at any one time.

VISUAL Enterprise – VISUAL Enterprise is a sophisticated, comprehensive software system that helps you run every facet of your business. Your unique business practices demand that VISUAL be adaptable to diverse business environments. This check box is selected if you do not have a license for VISUAL Aerospace & Defense.

The table at the bottom of the dialog box displays this information:

Name – The system inserts the name of the license; for example, DBR_LICENSE for Drum Buffer Rope.

License Key – The system inserts the License Key you specified in the Enter License Key dialog box.

Number of Users – The system inserts the number of users that are currently installed against the license. If you are licensed to use VISUAL Shop Floor, this value is blank. A VISUAL Shop Floor license does not have a user limit.

Expiration Date – The system inserts the date that the license is scheduled to expire.

Setting Up Icons

VISUAL is a large set of Windows programs that work together with a relational database system to form a comprehensive manufacturing system. You can set up desktop shortcuts to access the entire system or to access individual programs.

VISUAL Main Menu

The Main menu is the root application. It provides a menu system to activate all of the other applications. Two icons to execute this program are automatically created when you install VISUAL. One logs into the demonstration database provided with the product, and the other logs into the standard VMFG database.

Setting Up Individual Icons

It is possible to set up an individual Windows icon to start a single VISUAL application. This is useful for users who may only need a relatively small subset of applications. For example, a user in purchasing might frequently use Vendor Maintenance and Purchase Order Entry. Rather than start up the main menu to access these programs, you can set up two icons to invoke the programs directly. When you invoke a program in this way, database login takes place when you start each application.

Consult your Windows documentation for information on creating program icons.

Specifying Database and User Information

VISUAL works in the context of a specific relational database. It is possible for you to have more than one database. During implementation, you may have a test or demo database, along with the actual production one. When starting, VISUAL must have access to the name of the database.

Additionally, you need a user name and password to gain access to a database. These items are specific to an individual database. To have access to two different databases, a user must have an account in both.

When a database is created, there is always a default user that has the privilege to add other users. See your relational database administrator documentation for details.

You can specify database, user name, and password in the definition of the program icon, or in the VISUAL.INI file. If you specify all three of these items, VISUAL starts up directly, without requiring you to go through a login dialog box. If you do not specify one or more, the login dialog box appears and requires you to complete the information. To specify this information in an icon, use these switches on the command line:

-D Database Name

-U Username

-P Password

You can enter these parameters in any order. For example, to start VISUAL with database VMFG and username JOE, you would specify this information:

C:\Infor\VISUAL\VM.EXE -D VMFG -U JOE

The user is required to enter the password upon start-up.

You can also specify this information in the **Default Login Profile** option of Application Global Maintenance.

Any specification of database, user, or password information on the command line for the icon overrides settings in the VISUAL.ini file.

If system security is an issue for you, you should never specify a password in an icon or in the VISUAL.ini file. This not only allows access to anyone with access to the machine, but also allows the password text to be read from the file or icon.

Installing a Maintenance Release

Depending on your maintenance agreement, you can download periodic updates to the VISUAL code from Infor Customer Portal.

When you download an update, we strongly recommend that you install the update in a test environment for evaluation prior to updating the production environment.

Preparing to Install the Update

Before you install the update, make sure you stop VISUAL services. If services are running when you install the update, changes to the services may not be implemented.

To stop services:

1 Access Windows' Control Panel. In Windows 7, click the **Start** button, and then select **Control Panel**.

2 Click **Administrative Tools**.

3 Click **Services**.

4 Right-click the service and select **Stop**. Depending on your installation and the features you use, you may have these services:

  • Infor Visual Costing Service

  • Infor Visual Reporting Data Loader Service

  • Infor Visual Scheduling Service

  • Infor Material Resource Planning Service

  • Infor Visual Report Generation

  • InforVIsualBod2DB

  • Infor Visual BOD Generation

  • InforVisualDrillbackService

If you also use Infor VISUAL for .NET, you do not need to stop the .NET services. The .NET services are VISUAL Exchange Service and VISUAL Time and Attendance Service.

Installing the Update

To install the update:

1 From the disk or directory where you downloaded the maintenance release, double-click **Setup.exe**.

2 Click **Next**.

3 Select from these options:

Update a Full Installation – Select this option to update a full installation. A full installation includes all executables.

Update a Client Installation – Select this option to update client workstations. If you select this option only, the installer will only update those files used in a client installation. Client installation files include the user documentation, Pricebook files, COM files, and ActiveX controls. It will not install the full set of executables.

4   Click **Next**. The installer displays the path to your VISUAL directory. If you would like to install the programs in a different location, click **Change…** to specify a new location for the installation.

5   Click **Next**.

6   Click **Install** to begin the installation.

You should repeat the process for a full installation on all machines where you have installed all of the VISUAL executables. You should repeat the process for a client installation on all machines that access VISUAL but do not have the full set of executables installed.

Running Patch Scripts

Some maintenance releases include patch scripts. To ensure that your database is up-to-date, run the patch scripts on your database in sequential order.

To check your current patch script level, from the main menu select Help, About. The system displays the current patch level on the Database and Patch Level line.

To run patch scripts:

1   Navigate to the directory where you store your VISUAL executables and launch the Conversion Utility, VMCVTUTL.exe.

2   Verify that the information displayed for the database is correct. If any of the information is incorrect, make the appropriate changes.

3   Click **Run Script**.

4   Navigate to the patch script you would like to run. Patch scripts are specific to the type of database you use. Patch scripts for Oracle begin with OR710P, for example OR710P01. Patch scripts for SQLServer begin with SS710P, for example SS710P01. Patch scripts must be run in order; for example, if you use an Oracle database you must run OR710P01 before you run OR710P02.

You do not need to run patch scripts that have already been applied to the database. For example, if your current patch script level is SS710P03, then SS710P04 should be the first patch script you run.

5   Click **Open**. The patch script runs.

6   Repeat the process as necessary to install other patch scripts for your database type.

Post-installation Procedures

After you install the maintenance release, perform these procedures to complete the update.

Updating Report Overrides

If you have created report overrides, use the Compare function in the Report Format Overrides dialog box to review differences between your custom reports and the updated QRPs. You can use the list of differences to identify new inputs to add to your custom reports. To identify the QRPs that have changed, consult the list of program updates.

To compare reports:

1   Select **Admin**, **Application Global Maintenance**.

2   Select **Maintain**, **Report Format Overrides**.

3   Select the report row in the table.

4   Click **Compare**.

5   The dialog box shows the differences between the inputs for the standard report and the customized report. To restore all customized data input to the standard, click **Match to Standard**.

6   Click **Close**.

Restarting Services

After you install the maintenance release, restart VISUAL services.

To restart services:

1   Access Windows' Control Panel. In Windows 7, click the **Start** button, and then select **Control Panel**.

2   Click **Administrative Tools**.

3   Click **Services**.

4   Right-click the service and select **Start**.

Configuring Infor Support Assistant

Infor Support Assistant (ISA) gathers information about your operating environment and your installation of VISUAL via two xml files. These files provide information so that Infor Customer Portal can better assist you. The ISA Manager generates one XML file that lists information about your server environment. VISUAL generates the other XML file that lists information about your VISUAL installation, such as the database patch level.

To install the ISA Manager, see *Getting Started with ISA* for ISA 3, which is available in the Knowledge Base on Infor Customer Portal.

To configure the Infor Support Assistant Manager for use with VISUAL:

1 Sign in to the VISUAL database for which you want to collect data.

2 Select **Admin**, **ISA Configuration**.

3 Specify this information:

ISA Hot Folder directory – Specify the path for the ISA Hot Folder directory that you created when you installed the ISA Manager. When the ISA data file is generated for VISUAL, it is stored in this directory.

Collect data on First Sign-in of Day – Select this check box to automatically generate the data file when the first user of the day signs into VISUAL. Clear this check box if you do not want to automatically generate the data file.

4 Click **Ok**.

To generate the data file manually, click **Send Now**. Use this function if you do not automatically generate the file daily or if you want to generate a new version of the file.

Chapter 2: Database Management

This chapter includes this information:

Managing Your Database

VISUAL uses the power of a relational database management system for its data management needs. This allows you access to your data in a wide variety of ways. There are literally hundreds of other products available that you can use to access your database. These include reporting tools, spreadsheets, word processors, statistical analysis tools, and many others.

As a network or operating system requires an administrator to install, tune, manage, upgrade, and perform other tasks, your relational database system requires a Database Administrator (DBA). Often, the DBA is also your system administrator.

Some of the tasks a Database Administrator needs to perform and/or manage are:

Installation and Configuration – The relational database is a layered product. A separate vendor provides its software and documentation.

During and after the installation, you may have to edit various system files or change other settings in order for the database to work properly with the other products you are using.

User Management – The Database Administrator must become familiar with the user management and security features of your relational database manager. You must use these features to maintain and remove users and manage their access to the database.

Tuning – Most relational databases need to be tuned periodically. As the amount of data in your database grows, you may occasionally have to reorganize the database files, or change some tuning parameters. This is especially likely during the initial database population phase, as a large amount of data is being added at once.

Backups – The importance of a total backup plan cannot be overstressed. You MUST have a strategy for assuring that your data can be restored in the event of a hardware failure or other unexpected event. Your relational database administration documentation contains a great deal of information on managing this process.

During your implementation of VISUAL, you should appoint a DBA and plan for these and other tasks. The DBA should become familiar with the administration functions of the database system and the support organization for the database vendor. The DBA should take appropriate training, if necessary.

Updating Database Statistics

The system administrator should update database statistics on a periodic basis so that the database engine will always have the most up to date information about the database. Only a user with system administration privileges has permission to execute this option.

The database engine needs to know certain characteristics about your database in order to select the most efficient way to query your data. Rather than maintaining these statistics all the time, the database engine requires an authorized user to perform this update manually. This significantly improves performance since statistics are time-consuming to obtain.

During implementation you should execute this option at least once a day if you are adding large amounts of data to the system. Thereafter, execute this option AT LEAST weekly. You may be advised to run this program on a daily basis in order to improve system performance.

You can expect this program to run anywhere between 5 and 30 minutes, depending upon the size of your database.

Fixing Synonyms and Grants

When VISUAL fixes synonyms and grants, it creates the public synonym to all tables in the database so that all users will have access to the tables in the database. For the public synonym to work, you must have at least one privilege to each table. After VISUAL generates the public synonym, it then grants a select to all users for all tables.

To fix synonyms and grants:

1   Select **Admin**, **Fix Synonyms and Grants**.

2   Click **Start** to begin the procedure.

A dialog box is shown warning you that this procedure will only work if all other users are disconnected from the database.

3   Click **Yes** to continue.

A meter displays the progress through the database tables. During the procedure, you can click **Abort** to stop activity.

Turning on Trust

This information applies to SQL Server users only. This information does not apply to Oracle users.

In SQL Server databases, foreign keys and column constraints can be disabled, enabled, and trusted. If a foreign key or column constraint is enabled but not trusted, new data is validated, but any indexes that may be built will not be used. This can have a significant performance impact. Using indexes is generally faster than scanning a database table.

If you converted your VISUAL database to 8.x.x or later from an earlier version of VISUAL, foreign keys and column constraints are re-enabled and set to trusted if possible during the upgrade. If bad data exists in foreign key columns or column constraints, then trust cannot be enabled for the columns. If bad data is encountered during the upgrade process, the name of the table and column with the bad data is written to the vmcvtutl.log file.

After you correct the data issues, you can enable trust for any columns that had bad data. To turn on trust:

1   In your VISUAL executable directory, launch VMCVTUTL.exe.

2   In the Database Engine section, click SQL Server.

3   Specify this information:

    Database – Specify the name of your VISUAL database.

    SA Password – Specify the password you use for the SQL Server sa user.

4   Click **Turn on Trust**.

Performance Measurement

Use the Show Timing dialog box to help analyze system performance.

You can use the dialog to review the duration of these events:

• **Screen Time.** The amount of time it takes to open the window.

• **Populate Time.** The amount of time it takes to load a record into the window.

• **Save Time.** The amount of time it takes to save a record.

Timing information is recorded for these windows:

• Accounting Window

• Accounts Payable Invoice Entry

• Accounts Receivable Invoice Entry

• Customer Order Entry

• Estimating Window

• Inventory Transaction Entry

• Manufacturing Window

• Material Planning Window

• Order Management Window

• Part Maintenance

• Purchase Order Entry

• Purchase Receipt Entry

• Purchasing Management Window

• Shipping Entry

Timing information is recorded by user. Only the most recent occurrence of the event for each user is saved.

Viewing Timing Information

You must have system administrator privileges to view timing information.

1 Select **Admin**, **Show Timing**.

2 Review this information:

User ID – The ID of the user who opened the executable is displayed.

Program ID/Version – The executable file name and version is displayed.

Sign In Time – The date and time that the user launched the window is displayed.

Screen Time – The amount of time that it took to open the window is displayed.

Populate Time – The amount of time that it took to load a record into the window is displayed.

Save Time – The amount of time that it took to save a record is displayed.

3 Optionally, click the **Send to Microsoft Excel** button to export the contents of the dialog box to a Microsoft Excel file.

Deleting Timing Information

To delete the contents of the Show Timing dialog box:

1 Select **Admin**, **Show Timing**.

2 Click **Purge**.

3 In the confirmation dialog box, click **Yes**. The timing records are deleted.

Viewing Schema Information

You can use these tools to view information about the VISUAL database schema:

- **Schema report.** The Schema report shows a list of tables and columns in your database. You can view the report for all tables, or you can select the tables to view.

- **View the data source.** On individual windows in VISUAL, you can view the database table and column that stores the information in a particular interface object.

Generating the Schema Report

You can generate a list of the tables and columns in the VISUAL database. You can print the schema for selected tables only, or for all tables in the database. You can also view which columns are primary keys or foreign keys.

To generate the Schema Report:

1 Select **Admin**, **Print Database Schema**.

2 In the Starting Table Name and Ending Table Name fields, specify the tables to view in the report. Click the browse button to select from a list of tables. You can view:

- A single table. To view single table, specify the same table name in both fields.

- All tables. To view all tables, leave both fields blank.

- A range of tables. To view a range of tables, specify the first table to view in the Starting Table Name field and the last table to view in the Ending Table Name fields. The report displays all tables alphabetically between the Starting Table Name and Ending Table Name fields.

- All tables after a certain table. To view all tables after a certain table, specify the first table to view in the Starting Table Name field. Leave the Ending Table Name field blank. The report displays the table you specify and all tables alphabetically after the table.

- All table before a certain table. To view all tables before a certain table, specify the last table to view in the Ending Table Name field. Leave the Starting Table Name field blank. The report displays the table you specify and all tables alphabetically before the table.

3 To view which columns are primary keys or foreign keys, select the **Show Keys** check box.

4 Select a report output option. You can select:

Print – Select this option to send the report to a printer.

View – Select this option to view the report on your screen.

File – Select this option to save the report as a comma separated file.

E-mail – Select this option to email a copy of the report. To email the report as a PDF, select the PDF check box. Clear the PDF check box to email the report as an RTF file.

5 Click **Ok**.

Viewing the Data Source

Note: To use this feature, you must have system administration privileges.

You can use the Display Data Source toolbar button to display the database table and column that store the information shown in the interface.

You can use this feature on the main window. You cannot use the feature in the dialogs that you open from the main window, such as the Delivery Schedule dialog in Customer Order Entry.

The data source function is available in these windows:

- Accounting Window
- A/P Invoice Entry
- A/P Payment Entry
- A/R Cash Application
- A/R Invoice Entry
- Customer Maintenance
- Customer Order Entry
- Estimating Window
- IBT Entry
- Manufacturing Window (header, material, and operation cards only)
- Material Trace History
- Outside Service Dispatch Entry
- Outside Service Maintenance
- Part Maintenance
- Part Trace Maintenance
- Purchase Management Window
- Purchase Order Entry
- Purchase Receipt Entry
- Purchase Requisition Entry
- Receiving Inspection
- RMA Entry
- Shipping Entry
- Shop Resource Maintenance
- Task Maintenance
- Vendor Maintenance
- Vendor RFQ Entry

To display the data source of an interface object:

1 Open a window where the Database Source option is supported.

2 Click the **Display Data Source** button.

3   Click the interface object whose source you want to view. For fields, click the field. For check boxes and option buttons, you can click the label or the object. This information is displayed in the Status Bar at the bottom of the window:

- If a single database table and column supplies data to the object, then the table and column are displayed.

- If data in the field could be stored in more than one database table and column, then all database tables and columns that store the data are displayed. For example, if you view the data source for the Fabricated check box in Part Maintenance, both PART_SITE.FABRICATED and PART.FABRICATED are displayed.

- If data in the field is a calculation of multiple database tables and columns, such as the Grand Total field in Customer Order Entry, then Calculated is displayed.

- If the data in the field is derived from a single source, then Derived is displayed. For example, the Specs column in the line table in Customer Order Entry is a derived field. Its value is determined by the existence of a specification for the part on the line.

- If the data in the field is derived from multiple fields, then Derived from multiple fields is displayed. For example, the Supply Status column in the line table in Customer Order Entry is derived from multiple fields in the database.

4   To view the source for another object, click the **Display Data Source** button again and then click the second object.

Examining Triggers

Use the Examine Triggers tool to check your database for missing, current, and disabled triggers.

The Examine Triggers tool compares the list of required triggers to those it finds in the SYSTRIGGERS database table.

To examine database triggers:

1   Select **Admin**, **Examine Triggers**.

2   Click the **Run** toolbar button.

This information is shown:

Missing Triggers – The names of required triggers that are missing from the SYSTRIGGERS table are displayed in the Missing Triggers field.

Found Triggers – The names of triggers appearing in the SYSTRIGGERS table that are not required triggers are displayed in the Found Triggers field.

Disabled Triggers – The names of disabled triggers are displayed in the Disabled Triggers field.

3   When you have finished examining your database triggers, click the **Exit** toolbar button.

Examining Indexes

Use the Examine Index tool to identify differences between the indexes found in your database and a master list of valid indexes for a VISUAL database. The tool lists indexes that are missing from your database, indexes that are found in your database but not in the master list, and indexes that are incorrect. An index is incorrect if keys in the index are missing or are in the incorrect order.

If you use Oracle as your database engine, then valid indexes could have a different name than the anticipated name. If an index is not named when the index is created, then Oracle generates a name for the index. When indexes are examined, any additional indexes that have been identified are compared to missing indexes. If the structure of an additional index matches the structure of a missing index, both the additional index and missing index are removed from the lists.

After you analyze indexes, you can use the Repair tool to add missing indexes and repair incorrect indexes.

Analyzing Indexes

1   Select **Admin**, **Examine Indexes**. The current version of VISUAL, the database brand and patch level, and the database version are displayed.

2   Click the **Run** button. This information is displayed:

Total Indexes Expected – The total number of valid indexes is displayed.

Total Indexes Found – The total number of indexes in your database is displayed.

Missing Indexes – The list shows the valid indexes that were not found in your database.

Total Missing Indexes – The number of missing indexes is displayed.

Additional Indexes – The list shows indexes that were found in your database but are not in the list of valid indexes.

Total Additional Indexes – The number of additional indexes is displayed.

Incorrect Indexes – The list shows indexes that were not correctly created.

Total Incorrect Indexes – The number of incorrect indexes is displayed.

Repairing Indexes

Before you perform this procedure, ensure that only the SYSADM user is signed into the database.

1   Select **Admin**, **Examine Indexes**. The current version of VISUAL, the database brand and patch level, and the database version are displayed.

2   Click the **Run** button.

3   Click the **Repair** button. The tool attempts to add missing indexes to your database. It also drops incorrect indexes and recreates them. If a missing or incorrect index was not repaired, information

about the index is written to the VMCHKIDX_ERROR.LOG. This log file is located in the same directory as your VISUAL executables.

If you use Oracle as your database engine, then indexes could be created with incorrect names. If an index does not have a name, then Oracle generates the name for the index.

Reporting Database Tables

The Dashboard uses the reporting database tables to generate analytics and detail grids. Before you can view these metrics, you must load data into the reporting database tables.

After you load your existing data, you can decide how to keep the reporting database tables up-to-date. You can manually update the data, update the data automatically any time you change the VISUAL database, or use a service to update the data.

If you load your data manually, you can control when the update occurs. Loading the data manually offers you the most control over the data you load. You can choose to load only certain types of data, and you can use a date range to restrict the amount.

If you perform live updates of your data, then the reporting tables are always up to date with the latest information. Depending on the size of your database and the number of users, updating the data automatically may result in performance issues.

If you use a service to update the data, you specify when the reporting tables should be updated. You can specify a certain time of day to update the reporting tables, or you can specify how frequently to check for updates. When you use the service, each time a transaction is created, updated or deleted, a record is written to the SOA_DOC_SYNC table. When the service is run, the service checks this table to locate the information to update.

For more information about the Dashboard, see "Dashboard" on page 10–1 in the Concepts and Common Features guide.

Manually Loading Existing Data into the Reporting Database Tables

To load existing data:

1 Select **Admin**, **Application Global Maintenance**.

2 Select **Maintain**, **Visual Reporting Data**.

3 To load existing data immediately, in the Update Type section click either **Manual** or **Live**. You can also use the service to load existing data at a later time.

4 In the Start Date and End Date fields, specify the date range for the information to load. Leave both fields blank to load all existing data. To load all data after a certain date, specify a date in the Start Date field only.

5 In the table, select the data types to load. All data types except for VISUAL menu are used in the Dashboard metrics. You can use SHIFT+click and CTRL+click to select multiple rows.

6 Click **Load**.

Using the Reporting Data Loader Service to Load Existing Data

You can use the service to load existing data into the reporting tables. Use this feature to load existing data during a down-time for your company, such as over the weekend or later in the evening.

To perform this procedure, the service must be installed. See "Installing the Visual Reporting Data Loader Service" on page 2–15 of this guide.

To use the service to load existing data:

1 Select **Admin**, **Application Global Maintenance**.

2 Select **Maintain**, **Visual Reporting Data**.

3 In the Update Type section click **Service**.

4 In the Start Date and End Date fields, specify the date range for the information to load. Leave both fields blank to load all existing data. To load all data after a certain date, specify a date in the Start Date field only.

5 In the table, select the data types to load. All data types except for VISUAL menu are used in the Dashboard metrics. You can use SHIFT+click and CTRL+click to select multiple rows.

6 Click **Load**. If you selected Calendar Dates, the service immediately updates the reporting tables with calendar date information. For all other data types, the service updates the reporting tables when it is next scheduled to be run.

Updating the Reporting Database Tables

You can update the reporting database tables in three ways: manually, with live updates, or with a service.

To update the tables manually, click Manual in the Update Type section. Then, use the procedure for loading existing data to update the tables.

To use live updates, click Live in the Update Type section. Anytime a user add, edits, or deletes a record that affects the metrics, the reporting tables are automatically updated. While this ensures that you reporting tables are always up-to-date, performance issues can occur.

To use the Visual Reporting Data Loader Service, you must first install the service and then specify when to run the service.

Installing the Visual Reporting Data Loader Service

The Reporting Data Loader Service updates the reporting tables on the days and times you specify. The service is run against a specific VISUAL database. If you have multiple VISUAL databases and would like to run the service on all databases, then you must install the service once for each database.

To install the service:

1 In your VISUAL executables directory, locate VRDTASVC.EXE.

2 Right-click VRDTASVC.EXE and select **Run as Administrator**. The Sign In dialog is displayed.

3 Specify this information:

User ID – Specify the user ID that the service uses to sign into the VISUAL database. This can be any valid VISUAL user ID.

Password – Specify the password associated with the user ID.

Database – Specify the database on which to run the service.

4 Click **Sign In**. The name and description of the service is displayed.

5 Specify this information:

Log File Directory – Specify where to store the log file for the service.

Polling Interval – Specify how frequently the service should check for updates. The maximum value is 900 seconds.

Log Level – Specify the level of information to write to the log file. Click one of these options:

None – To write the time the service started, click this option. This option is recommended for normal production environments.

Error – To write the time the service started and any error messages, click this option.

Info – To write to the time the service started, error messages, and additional information about the service, click this option. The use of this option is recommended only if you are troubleshooting issues with the service. When you use this option, the size of the log file grows quickly.

The log file's name is VRDTASVC.log. The size of the log file is limited to 1 MB. When the log file approaches 1 MB, the log is renamed to VRDTASVC_[Current date time].log, and a new VRDTASVC.log is created.

6 Click **Install Service**.

Scheduling the Service

To schedule the service:

1 Select **Admin**, **Application Global Maintenance**.

2 Select **Maintain**, **Visual Reporting Data...**.

3 In the Update Type section, click **Service**.

4 Use the Service Schedule section to specify when the service is active. Specify this information:

Start Date – Specify the date that the service should start checking for updates. Leave this field blank or specify today's date if you do not want to delay the start of the service.

End Date – Specify the last date that the service should check for updates. Leave this field blank if you do not want to set up an expiration date for the service.

Enabled – To use the service, select this check box. To stop using the service, clear this check box.

5   In the Run Type section, specify whether the service continually checks for updates on the days you specify or checks for updates only at specified times. Click one of these options:

Immediate – To indicate that the service should continually check for updates on the days you specify, click this option. When you click this option, the polling interval specified when the service was installed is used to determine how frequently the service checks for updates. For example, if 600 was specified as the polling interval, then the service checks for updates every 600 seconds (10 minutes).

Weekly – To indicate that the service should check for updates only on the days and times you specify, click this option. When you click this option, the Run At fields become active.

6   In the Days of Week section, specify the days of the week to run the service.

7   The Run At section is available only if you clicked Weekly in the Run Type section. Use the Run At section to specify the times of day that the service should check for updates. The times you specify apply to all days that you run the service. You can run the service up to 6 times a day.

Note: The service may not run exactly at the time you specify. The service is prompted to check for updates at the time you specify, but the polling interval specified for the service may pass before the data is written to the reporting tables.

8   Click **Save**.

Monitoring the Service

You can view when the Reporting Data Loader Service was last run in the Visual Reporting Data Loader dialog. You can use this information to verify that your reporting tables are up-to-date. You can also reset the last run date.

To view and reset the last run date:

1   Select **Admin**, **Application Global Maintenance**.

2   Select **Maintain**, **Visual Reporting Data...**.

3   The date that the service was last run is displayed in the Last Run field. To clear this date, click **Clear**, and then click **Save**.

Removing the Reporting Data Loader Service

To remove the service:

1   In your VISUAL executables directory, locate VRDTASVC.EXE.

2   Right-click the VRDTASVC.EXE and select Run as Administrator. The Sign In dialog is displayed.

3   Specify this information:

User ID – Specify the user ID that the service uses to sign into the VISUAL database. This can be any valid VISUAL user ID.

Password – Specify the password associated with the user ID.

Database – Specify the database on which to run the service.

4   Click **Sign In**.

5   Click **Remove Service**.

Dashboard and VISUAL Financials Global Edition

If you use Infor VISUAL Financials Global Edition 8.1, you can set up subscriptions in VISUAL Exchange to update the reporting database tables when you create or edit transactions in VISUAL Financials Global Edition. In VISUAL Exchange, activate these subscriptions:

• VFIN_PAYABLE and VFIN_VMFG_VF_PAYABLE

• VFIN_RECV_INVOICE and VFIN_VMFG_VR_RECEIVABLE

After you activate the subscriptions, you can request exchanges to load existing data into the reporting tables. As long as the subscriptions are active and the Exchange service is running, any new transaction information is exchanged into the reporting database tables automatically.

See "Activating Subscriptions for VISUAL Dashboard" and "Loading Existing Data into VISUAL Dashboard Reporting Tables" in the VISUAL Exchange online help.

Chapter 3: User Management

Use the Security modules to add users, specify password requirements, and manage user access to VISUAL executables.

Your database management system includes at least one default system management account that you can use to log into the database and add other users. This account has full privileges and is used as the starting point to set up other users and their privileges.

Setting Up Users

Users have access to the database. Create a User ID for anyone who needs to enter information into the database.

Your license key determines the number of users you can add. License keys can specify a number of named users or a number of concurrent users.

If your license provides for named users, the number of users allowed by the license is the number of User IDs you can create in the database. For example, if your license allows for 100 named users, you can create up to 100 User IDs. If you attempt to create a 101st User ID, you would be prevented from adding it.

If your license provides for concurrent users, the number of users allowed by the license is the number of users that can access the database at any one time. For example, if your concurrent license allows for 100 users, you could create 200 User IDs, but only 100 users could be logged into the database simultaneously.

Note: If you use VISUAL CRM and your VISUAL license is a named user license, then you can specify which application license is used by each user. For more information, refer to the "Setting Up Users in an Integrated VISUAL and CRM Environment Using Mixed Licensing" section.

You can use Users Maintenance to:

• Add users to the database
• Change a user's password
• Delete a user

Setting Up Users in an Integrated VISUAL and CRM Environment Using Mixed Licensing

VISUAL uses either a concurrent license or a named user license. CRM uses a concurrent license.

If your VISUAL license is a concurrent license, then you can import all VISUAL User IDs into CRM. All User IDs can access both systems until the concurrent limit is met.

If your VISUAL license is a named user license, then you can decide which users are licensed to use VISUAL, which are licensed to use CRM, and which are licensed to use both applications. The VISUAL named license does not limit the number of CRM-only users that you can create allowing you full use of your CRM concurrent license.

If a user is licensed for VISUAL only, then that user can only use VISUAL and cannot use CRM. The user cannot sign into CRM by launching the CRM executable or by drilling into CRM from Activities Maintenance. A VISUAL-only user is counted against the named user license.

If a user is licensed for CRM only, then that user can only access CRM. The user cannot use VISUAL either directly through the VISUAL executables or by drilling into VISUAL using the CRM Back Office menu. A CRM-only user is not counted against your VISUAL named user license. You can create as many CRM-only users as you need.

A categorization of user counts to aid in license consumption are displayed as follows:

Licensed Users – Count of Visual users as defined by the license key.

Entered Users – Number of Visual and non-Visual users added to the database.

VISUAL Users - Number of users assigned to Visual.

Other Users - Number of users assigned to applications other than Visual such as CRM and Shop Floor.

Logged In Users – Number of users currently logged into Visual.

If you specify that a user is licensed for both VISUAL and CRM, then the user can access both applications. The user is counted against your VISUAL named user license.

When you import users from VISUAL into CRM, you can import users with the CRM check box selected.

You can specify application licensing usage when you create the user or update existing users.

Adding Users

To add a new user:

1 Select **Security**, **Users**.

2 Click **Insert**.

3 Specify this information:

User ID – Specify the user's ID. The ID can be up to 19 characters long.

Note: While the User ID field accepts up to 20 characters, you must limit user IDs to 19 characters. Selected special characters like #, $, _,., - are allowed in the creation of User ID. When you create a User ID, a secondary user ID is also created. This secondary user ID is used to manage tasks such as changing the user's password. The secondary user ID is created by adding a # character to the end of the user ID. If you specify a user ID with 20 characters, then the secondary user ID will have 21 characters. The 21-character length can cause issues with database triggers and other functions. Therefore, you must limit user IDs to 19 characters. You cannot use the secondary user ID to sign into VISUAL.

Password – Specify the user's password. Refer to the "Managing Password Configuration" section in this chapter.

Repeat Password – Repeat the user's password.

4 The applications that you are licensed to use are displayed. Select the check boxes for the applications that the user can access.

5 **Copy User Permissions** – Select the user id of which you would like to copy security permissions from. If a user id has not been selected, the new user will be added without permissions to Visual and will need to be defined in the Security Maintenance window.

6   **Default Site ID** – Select a site to be assigned as the default site to the new user.

7   Click **Save**.

Changing Users' Passwords

If users forget their passwords or are locked out of the system, the system administrator can change the passwords for the users. Users can be locked out of the system based on how passwords are configured.

To change a user's password:

1   Select **Security**, **Users**.

2   Select **Search** and enter user ID.

3   Click **Search** or manually find the **User ID**.

4   For the user whose password you are changing, specify this information:

   Password – Specify the user's password. Refer to the "Managing Password Configuration" section in this chapter.

   Repeat Password – Repeat the user's password.

5   Click **Save**.

Prompting Users to Change Passwords

Use this procedure to prompt users to change their passwords during their next login. Users must change their passwords when prompted. They will not be able to sign in to VISUAL with their existing passwords.

To create a password expiration policy, use the Password Configuration dialog. See "Managing Password Configuration" on page 3–6 in this guide.

1   Select **Security**, **Users**.

2   Select **Search** and enter user ID.

3   Click **Search** or manually find the **User ID**.

4   Select the **Reset Password** check box in the rows that contain the users who must reset their passwords when they next sign in.

5   Click **Save**.

Deleting a User

You can delete obsolete User IDs.

To delete a User ID:

1   Select **Security**, **Users**.

2   Select the row that contains the user ID to delete.

3   Click **Delete**.

4   Click **Save**. The User ID is removed from the database.

Managing Password Configuration

Use Password Configuration to specify password requirements and longevity settings.

To specify Password Configuration settings:

1   Select **Security**, **Password Configuration**.

2   If you do not want your users to use their User ID as a password, select the **User ID and Password Must Be Different** check box. This check box may be selected by default depending on your database platform.

3   In the Password Retention section, specify this information:

Retire Password After – To force your users to change their passwords after a set time, select the **Retire Password Every** check box. When you select this check box, the Days field and the Allow Reuse After check box become available.

Days – If you selected the **Retire Password Every** check box, specify the number of days users can use their passwords before they must change them.

Allow Reuse After – To allow your users to reuse their passwords, select the **Allow Reuse After** check box.

Cycles – If you selected the **Allow Reuse After** check box, enter the number of cycles to wait before users can repeat a password. For example, if you specify 5, users can reuse a password after they have changed the password at least five times.

4   In the Retry Attempts section, specify this information:

 # Retry Attempts Allowed – Specify the number of attempts users can make to enter the correct password. If users exceed the number of retry attempts allowed, they will be locked out of the database. When you specify a number in this field, the system activates the Minutes to wait before retry and Password must be reset by administrator options. Leave the field blank to allow the user an unlimited number of attempts to enter the correct password.

Minutes to wait before retry – Select this option to require users to wait before logging into the system after exceeding the number of retry attempts. Specify the number of minutes users must wait in the Minutes to wait before retry field.

Password must be reset by administrator – Select this option to require a system administrator to reset user passwords after users exceed the number of retry attempts. System administrators can reset passwords using the Changing Users' Passwords procedure.

5   In the Password Identification section, define the requirements passwords must meet. To exclude a requirement from passwords, leave the field blank. Specify this information:

Minimum Password Length – To require passwords be a certain length or larger, specify the minimum length in this field.

Minimum Digits – To require passwords to contain numeric characters, specify the minimum quantity of numeric characters in this field.

Minimum Letters – To require passwords to contain alphabet characters, specify the minimum quantity of alphabet characters in this field.

> **Minimum Uppercase Letters** – To require passwords to contain uppercase letter characters, specify the minimum quantity of uppercase letters in this field.

Minimum Lowercase Letters – To require passwords to contain lowercase letters, specify the minimum quantity of lowercase letters in this field.

Minimum Special Characters (# $ _) – To require passwords to contain special characters, specify the minimum quantity of special characters in this field.

For example,

Users cannot have User IDs and Passwords that match,
they must change their password every 30 days, and
can only reuse a password after they have change it more than five times.

Passwords must be at least eight characters in length and
must contain at least two numbers and two letters.

At least one of those letters must be in uppercase and one in lowercase.

User must have at least one special character in their passwords.

For example, user **Bob** cannot have a password of **Bob** because it is the same as his User ID and it does not meet the configuration criteria. Bob could use a password similar to:

```
Bob1_2User
```

because it meets all of the configuration criteria: it has at least 8 characters, 2 of which are digits and 2 of which are letters. It has at least 1 uppercase and 1 lowercase, and contains a special character.

6 Click **Save**.

Using the Security Maintenance Window

The system administrator has significant control over users' access to VISUAL applications. The system administrator can control:

Ability to change record status – The system administrator can limit users' ability to change the status of Purchase Orders, Customer Orders, Work Orders, PacklIsts, Quotes, Requisitions, and Engineering Change Notices.

Default Shipping Address – The system administrator can select a default shipping address that will be used on any purchase order that the user creates. The user has the option of overriding the address in Purchase Order Entry.

Physical Inventory Count – The system administrator can control which users can perform a physical inventory count.

Ability to Edit Records in the Advanced Browse Table – The system administrator can prevent users from adding, deleting, or editing information to the database through the Edit Browse functionality.

Access to Menus – The system administrator can prevent users from accessing menus. If users do not have access to a menu, they cannot see the menu or access any of the menu's executables.

Access to Programs – The system administrator can control the type of access users have to individual programs. The system administrator can grant full access or read-only access, or deny access to a program completely. Within certain programs, the system administrator can control access to particular fields or tabs.

Access to Macros – If you store macros in the database, the system administrator can assign macros created by the SYSADM user to security profiles. When profiles are assigned to users, users can run the macros assigned to the profile.

Access to Sites – In a multi-site database, the system administrator assigns sites to users. The sites the system administrator assigns are the user's allowable sites.

The system administrator can set up user access on a user-by-user basis or can create security profiles to apply to users. For example, the system administrator can set up a profile named "Accounts Receivable Administrator" with access to the accounts receivable, shipping, and customer maintenance functions. Then, the system administrator can apply the profile to the appropriate accounts receivable users. The system administrator can assign more than one profile to a User ID.

The system administrator also creates user groups in Security Maintenance. User groups are used in Purchase Requisition Maintenance, Engineering Change Notices, and Workflow. Members of user groups are responsible for approving purchase requisitions, engineering change notices, and workflow processes.

Accessing the Security Maintenance Window

From the Security menu, select **Profile/User/Group Security**.

Use the Security Maintenance window to:

• Set permissions for individual users

- Create security profiles

- Assign macros to security profiles

- Apply security profiles to users

- Create user groups

- Copy user groups

- Copy permissions from one user to another user

Setting Permissions for Individual Users

You can set up permissions on a user-by-user basis. To set up permissions for an individual user:

1 In the Security by section, click **User**.

2 Click the **User ID** browse button and select the user for whom you are setting up permissions.

3 In the Language ID field, specify USA. To assign a language to a user, use the Language Assignment dialog. See "Assigning Languages to Users" on page 6–11 in this guide.

4 To grant this user system administrator privileges, select the **System Administrator** check box. Users with system administrator privileges can add new users to the database and access most of the options in the Security modules.

Only the SYSADM user can assign a user System Administrator privileges.

5 Use the tabs to specify additional security settings. Refer to "Setting Information on Status Tabs," "Setting Information on the Menu Tab," "Setting Information on the Program Tab," and "Setting Information on the Allowable Sites" tab.

6 Click **Save**.

Setting Information on Status Tabs

Several types of records, such as Purchase Orders, Customer Orders, Work Orders, Packlists, Quotes, Requisitions, and Engineering Change Notices (ECNs), employ a Status field. Use the Status tab and the ECN Status tab to control which statuses a user can employ. Limiting the statuses a user can employ controls the actions the user can perform on a record.

You also use the Status tab to specify the user's default purchase order shipping address, ability to perform a physical inventory count, and the ability to edit database records from the advanced browse table.

To specify status information:

1 Verify that the User ID you want to use is displayed in the User ID field.

2 In the **Status** tab, specify the statuses the user can employ for each type of record. The statuses that are displayed in the Customer Orders section apply to the customer order header and customer order line. For example, if you select Firmed and Released, then the user can set both

the order header and order line to Firmed or Released. The user can also set the order line status to Inherit.

3   Click the **Default Shipping Address browse** button and select an address. If the user creates a purchase order, the address that you specify here is used as the default ship to address on the purchase order.

4   Select the **Physical Inventory Count** check box to allow users the ability to perform physical inventory counts.

5   Select the **Edit Browse** check box to allow users to edit records in advanced browse tables. Selecting this option also allows users to import information from Microsoft Excel into the advanced browse table.

6   Select the **Edit Macros** check box to allow users to edit macros. To prevent users from editing macros, clear the check box.

7   Select the Display Data Source check box to control access to the Display Data Source program component. When enabled, authorized users can invoke the Display Data Source function in all supported forms.

8   Click the **ECN Status** tab and specify the statuses user can set for ECNs.

9   Click **Save**.

Setting Information on the Menu Security Tab

Use the Menu Security tab to specify the menus that the user can access. If you deny a user access to a menu, the user also cannot access any of the applications listed in the menu.

To specify menu security settings:

1   Verify that the User ID you want to use is displayed in the User ID field.

2   Click the **Menu Security** tab.

3   Specify which menus you would like the user to access. Specify **Yes** to allow access and **No** to deny access.

4   Click **Save**.

Setting Information on the Program Security Tab

Use the Program Security tab to set permissions on individual applications. You can give users full access, read-only access, or deny access to the program. In some cases, you can grant or deny access to individual program components, such as tabs and menu functions. In other cases, you can grant full access or read-only access to certain program fields.

To specify program security settings:

1   Verify that the User ID you want to use is displayed in the User ID field.

2   Click the **Program Security** tab.

3 Specify the executables the user can access. The name of the application as it appears in the menus and the program ID of the application are provided. The program ID is the actual file name of the executable. In the Access column for each program ID, specify one of these options:

Yes – The user has full access to the executable, unless you have limited access to the executable's components or fields.

Read Only – The user can view information in the executable, but cannot create new records or edit existing records.

No – The user has no access to the executable.

4 You can set Profile String options for the Manufacturing Window, Purchase Order Entry, and Purchase Requisition Entry. When you select one of these programs in the Program Security table, the system activates the Set Profile options button. Click the Set Profile Options button to set up the this information:

Manufacturing Window – The Manufacturing Window executable controls three separate functions: Quotes, Work Orders, and Engineering Masters. You can choose which of these functions the user can access. Click the drop-down button and select Yes, Read Only, or No.

If you specify the same setting for all three functions, the system changes the Access column to match.

Purchase Order Entry – Specify a ceiling amount for the user. The user will not be able to save a purchase order if the total of the purchase order exceeds the limit you set for the user. Leave the field blank to allow the user to save a purchase order in any amount.

Purchase Requisition Entry – Specify a ceiling amount for the user. The user will not be able to save a purchase requisition if the total of the purchase order exceeds the limit you set for the user. Leave the field blank to allow the user to save a purchase requisition in any amount.

5 If the Component column contains "Yes" or "No," you can control access to specific program components such as tabs and menu functions. If the Component column contains "Yes," then the default component settings have been changed. If the Component column contains "No," then the default component settings have not been changed. For more information on the program components for which you can define security settings, refer to Program Component Security Settings.

6 If the Field column contains "Yes or "No," you can control access to specific program fields. If the Field column contains "Yes," then the default field settings have been changed. If the Field column contains "No," then the default field settings have not been changed. For more information on the program fields for which you can define security settings, refer to Program Field Security Settings.

7 Click **Save**.

The changes to application user permissions take effect the next time the user opens the application. For example, if you have changed permissions for user "Bob" for Part Maintenance and Bob has Part Maintenance open, those permissions do not take effect until Bob closes Part Maintenance and starts it again.

Program Component Security Settings

This table lists the program components for which you can set security settings. When you select one of these programs in the Program Security table, the system activates the Component button. Click the Component button and specify **Y** to allow access to program components or **N** to deny access to

components.

Menu String Program ID	Components	Notes
Accounting Window VFGLAWIN	Maintain G/L Single Budget Maintain G/L Multiple Budgets Change Active Status Change Account Type Close/Reopen Period Print Trial Balance Print Basic Balance Sheet Print Basic Income Statement Maintain Subordinate Accounts Change Control Account Setting Transact Against Control Account	Maintain G/L Single Budget disables the Single Budget item in the Budget drop-down menu. If you disable the Budget field in Fields security, this function is also disabled despite your setting here.

Maintain G/L Multiple Budgets disables the Multiple Budgets item in the Budget drop-down menu. If you disable the Budget field in Fields security, this function is also disabled despite your setting here.

Change Active Status prohibits user from changing the Active check box selection. If you disable the Active field in Fields security, this function is also disabled despite your setting here.

Change Account Type disables the Account Type options

Close/Reopen Period disables the Maintain, Close/Reopen Period function

Print Trial Balance disables the File, Print Trial Balance function

Print Basic Balance Sheet disables the File, Print Basic Balance Sheet function

Print Basic Income Statement disables the File, Print Basic Income Statement option

Change Control Account Setting disables the Control Account checkbox.

Transact Against Control Account disables the ability to use a Control GL Account on a transactional GL posting |

Menu String Program ID	Components	Notes
Activity Entry VMACTENT	Edit Activity Categories Edit Activity Types	
Contact Maintenance VMCONMNT	Audit History	
Costing Tools VMAPLTLS	Print Cost of Goods Sold Print Distribution Analysis Print Accrual Analysis Print Preparation Analysis Print FIFO Analysis Recalculate Distributions Recalculate Standard Costs Recalculate WIP Recalculate Inventory Balances	You can limit access to almost every File menu option. Use this access control to protect sensitive database costing information.
Costing Utilities VMAPLUTL	Schedule Costing	Use this setting to control which users can schedule the Costing Service for their allowable sites.
Customer Maintenance VMCUSMNT	Credit Limit Tab Accounting Tab Add Terms Rules General Tab Contact Tab User Defined Tab VAT Tab Intrastat Tab Order Management Tab E-Commerce Tab Lang Forms Tab Shipping Tab 3PL Tab Specifications Tab Add Customer Delete Customer Audit History	You can control access to all tabs in the Customer Maintenance window and control the ability to add or delete customers. You can also remove the ability to create terms rules. Users can still select from available terms rules. If you specify No for the Add Customer setting, users can edit and delete an existing customer record, but cannot create a new record. If you specify No for the Delete Customer setting, users can add a customer and edit an existing customer, but cannot delete a customer record.

Menu String Program ID	Components	Notes
Customer Order Entry VMORDENT	DC Class Add Terms Rules Production Cost and Gross Profit Process Activity Audit History	You can remove the ability to create terms rules. Users can still select from available terms rules. If you specify No for the Production Cost and Gross Profit settings, users cannot view the Order Line View panel.
Dashboard VMDBOARD	Edit Data Source Edit Detail Grid Edit Analytic Export Content Import Content Can add shared Dashboards	If you specify No for the Can Add shared Dashboards setting, users can only add dashboards for themselves.
DBR Scheduler VMDBRSCH	Set as Scheduled	Use the Set as Scheduled setting to control which users can schedule the DBR Scheduling Service for their allowable sites.
Document Maintenance VMDOCMNT	ECN Revision Control Revision & Stage Document Folders Copy Documents	Disables the ECN Revision Control check box Disables the Stage and Revision fields

Menu String Program ID	Components	Notes
ECN Maintenance VMECNENT	Edit request explanation Edit response explanation Edit change request originator Configure auto number format Modify authorization team Modify implementation team Modify approval team Modify distribution team Use 'Where Used' dialog Use 'Subordinate Parts' dialog Use 'Work in Process' dialog Edit Creator Set Revisions Update Revisions Set Stage	
Estimating Window VMESTWIN	Add Terms Rules Process Activity Audit History	If you specify No for Add Terms Rules, the ability to create terms rules is removed. The user can select from available terms rules.
GL Burden Mapping Maintenance VMMAPMNT	Cost group maintenance Cost category maintenance Burden category maintenance Burden group maintenance	
General Journal Entry VFGLTENT	Prevent User from Deleting Batches	Select Yes to prevent the user from deleting batches. Select No to allow the user to delete batches.
Generate Sales Commissions VFSCPGEN	Add Terms Rules	The ability to create terms rules is removed. The user can select from available terms rules.

Menu String Program ID	Components	Notes
Global Scheduler VMGLBSCH	Copy to STANDARD Schedule Set as Scheduled	You can stop a user from copying a schedule to the production schedule. Use this access control to protect the integrity of your production schedule. Use the Set as Scheduled setting to control which users can schedule the Scheduling Service for their allowable sites.
Inventory Transaction Entry VMINVENT	Allow inventory transfer from location that does not share inventory Location maintenance Allow New Material Req't Allow issue of alternate parts	
Invoice Forms VMINVGEN	Email Invoices	
Invoice Forms VMINVGEN	Create A/R Invoices	Use Create A/R Invoices setting to control which users can Create A/R Invoices in Invoice Forms. Select "Yes" to allow the user to Create A/R Invoices in Invoice Forms. Select "No" to prevent the user to Create A/R Invoices in Invoice Forms.
Invoice Entry (Receivables) VFARIENT	Add Terms Rules	The ability to create terms rules is removed. The user can select from available terms rules.
Invoice Entry (Payables) VFAPIENT	Add Terms Rules	The ability to create terms rules is removed. The user can select from available terms rules.

Menu String Program ID	Components	Notes
Labor Ticket Entry VMLABENT	Add Labor TIcket Edit Labor Ticket Delete Labor Ticket Manufacturing Tab Project % Comp Tab Project Hours Tab	
Manufacturing Window VMMFGWIN	Allow part add on-the-fly Audit History Modify Alt. Part Flag on Eng Master Header Modify Alt. Part Flag on Quote Master Header Modfy Alt. Part Flag on Work Order Header Modify Alternate Parts on Eng Master Modify Alternate Parts on Quote Master Modify Alternate Parts on Work Order Show Costs Show Labor Tickets Mark Unreleased Work Orders as What-if	You can control access to the labor tickets reported to work orders and the accompanying costs.
Material Planning Window VMPLNWIN	Master Production Schedule Material Resource Planning Material Resource Planning Scheduler Service	If you specify N for the Material Resource Planning Scheduling Service, the user cannot set schedule the MRP service.
Move Request	Delete Move Request	
Order Management Window VMORDWIN	DC Class Add Terms Rules Production Cost and Gross Profit Process Activity Audit History	You can remove the ability to create terms rules. Users can still select from available terms rules.

If you specify No for the Production Cost and Gross Profit settings, users cannot view the Order Line View panel. |
| Outside Service Maintenance VMSRVMNT | Change Status Audit History | |

Menu String Program ID	Components	Notes
Part Maintenance VMPRTMNT	ABC Analysis	To protect the integrity of your PARTS table, selectively grant or deny access to virtually every component of the Part Maintenance window, including the ability to add a part.
	Accounting Tab	
	Add Part	
	Audit History	
	Change Status	
	Commodity code maintenance	
	Configuration Management Tab	
	Costing Tab	
	Cycle count maintenance	
	DBR Tab	
	Defaults Tab	
	Delete part	
	Edit Functional Areas	
	Edit Part - Customer Order Specifications	
	Edit Part - Manufacturing Specifications	
	Edit Part - Purchase Order Specifications	
	Edit Part Specifications	
	Hold reason maintenance	
	Implode costs	
	Implode hours	
	Location Maintenance	
	Order Management Tab	
	Part Price Group	
	Piece Tracking Tab	
	Planning Tab	
	Product code maintenance	
	Purchase price maintenance	
	Reset material costs	
	Reset Part Information	
	Selling price maintenance	
	Specifications Tab	
	Unit of measure conversion maintenance	
	User defined Tab	
	VAT Tab	

Menu String Program ID	Components	Notes
Part Trace Profile Maintenance VTTRPMNT	Modify when to apply traceability - Receiving Modify when to apply traceability - Issuing Modify when to apply traceability - Adjustments Modify when to apply traceability - Labor Tickets Use 'Preferences' dialog Use 'Auto Fill' dialog	
Progress Billing Entry VMPBCENT	Email Invoices	
Project Billing Entry VMPRJBNT	Email Invoices	
Project Maintenance VMPRJMNT	Billing Ceilings Contract Information Contractual Financial Information Terms and Conditions WBS Codes Audit History	
Project Summary VMPRJSUM	Apply new rate to ETC Budget maintenance Calculate earned value Calculate estimate to complete Distribution codes EAC/Target costs ETC maintenance Lock baseline Project Accounts Spread budget Update ETC with actuals	
Project Window VMPRJWIN	Budget ETC WBS Codes Labor Tickets	

Menu String Program ID	Components	Notes
Purchase Management Window VMPURWIN	Generate Purchase Order from Requisition Generate Purchase Order from RFQ Add Terms Rules Audit History	You can remove the ability to create terms rules. Users can still select from available terms rules.
Purchase Order Entry VMPURENT	Generate Purchase Order from Requisition Generate Purchase Order from RFQ Add Terms Rules Audit History	You can remove the ability to create terms rules. Users can still select from available terms rules.
Purchase Requisition Entry VMREQENT	Edit Status Edit Approval 1 Edit Approval 2 Edit Approval 3 Edit Approval 4 Edit Buyer Audit History	
Rate Management VMRTEMNT	Retro burden Post to G/L Rate Analysis Rate Change Impact Analysis	
Return Material Authorization VMRMAENT	Audit History	
Scheduling Window VMSCHWIN	Copy to STANDARD Schedule	You can stop a user from copying a schedule to the production schedule. Use this access control to protect the integrity of your production schedule.

Menu String Program ID	Components	Notes
Shop Floor SHOPFLR	Allow Assigning Move Request Pickup Employee Allow Auto Stop Jobs on Clock Out Allow Break Allow Clock In Allow Clock Out Allow Create Move Request When Entering Inventory Transactions Allow Create Move Request When Reporting Labor Allow Delete Move Request Allow Dispatching Allow End Break Allow End Meal Allow Indirect Allow Inventory Transaction Scan Mode Allow Labor Entry Scan Mode Allow Move Request Pickup and Deliver Allow New Material Req't Allow Off Site Allow On Site Allow Purchase Receive All Allow Setting Move Request Priority Allow Start Break Allow Start Indirect Allow Start Meal Allow Start Run Allow Start Setup Allow Stop Indirect Allow Stop Job Allow Stopping Multiple Jobs Allow Wip Transaction Scan Mode Allow Work In Process Adjust In Allow Work In Process Adjust Out Allow Work In Process Transfer	Use Shop Floor component security to specify the actions that can occur in Shop Floor when the user is signed in. For more information, see the *Infor VISUAL Shop Floor Installation and Configuration Guide*.

Menu String Program ID	Components	Notes
Shop Floor	Employees Clocked In Inventory Transaction Entry Job Search Labor by Work Order Labor Entry Labor Ticket List Material Handler Queue Material List Move Request My Labor Operation List Part Lookup Physical Inventory Print Labels Purchase Orders Due Purchase Orders Received Purchasing Receiving Entry Scheduling Shipping Shipping Return Work In Process Inventory Lookup Work In Process Tracking Work In Process Transaction Entry Work In Process Transaction History Work Order Move Requests	
Shop Resource Maintenance VMRESMENT	Audit History	

Menu String Program ID	Components	Notes
Vendor Maintenance VMVNDMNT	Accounting Tab Payment Tab Vendor Banks Add Terms Rules General Tab Contact Tab User Defined Tab VAT Tab Intrastat Tab Specifications Tab Exclude Buyers Add Vendor Delete Vendor Audit History	You can control access to all tabs in the Vendor Maintenance window and control the ability to add or delete vendors. You can remove the ability to create terms rules. Users can still select from available terms rules. If you specify No for the Add Vendor setting, users can edit and delete an existing customer record, but cannot create a new record. If you specify No for the Delete Vendor setting, users can add a customer and edit an existing customer, but cannot delete a customer record.
Vendor RFQ Entry VMRFQENT	Audit History	
Warehouse Maintenance VMWHSMNT	Audit History	
WIP Inventory Transaction (VMWIPTSF)	Delete WIP Transaction	
Work Order Traveller VMTRVRPT	Schedule Report	If you specify No for the Schedule Report setting, the user cannot create schedules for the Work Order Traveller service.
Workflow Designer VMWRKFLO	Allow Inactive Status Only	

Program Field Security Settings

You can restrict access to the program fields listed below. You can specify full access or read-only access. Users with read-only access can view the information in the fields, but cannot edit the information

Menu String Program ID	Fields	Notes
Accounting Window VFGLAWIN	Account Sub Type Active Budget Display Currency Description Entity ID Summarize to Acct ID Project Account Revalue Summary Account Type	
Customer Maintenance VMCUSMNT	Active Address Line 1 Address Line 2 Address Line 3 Bill to Address Line 1 Bill to Address Line 2 Bill to Address Line 3 Bill to City Bill to Country Bill to Name Bill to State Bill to Zipcode City Country Name State Web Site ZIpcode	

Menu String Program ID	Fields	Notes
Inventory Transaction Entry VMINVENT	Adjust In Adjust Out Issue Material Receipt by Part Receipt by Work Order Receipt Return	You can control the ability to commit transaction activities or to set in view only mode by selecting either 'Yes' or 'Read Only.' For each inventory transaction type, specify **Yes** to grant users the ability to enter and edit inventory transactions of that type. Specify 'Read Only' to prevent users from entering and editing inventory transactions of that type. For example, if you specify 'Read Only' for Receipt by Work Order, the user cannot enter or edit a Receipt by Work Order inventory transaction, but they can still view them.
Manufacturing Window VMMFGWIN	Customer Priority	Specify **Yes** to allow users to specify a value in the Customer Priority field, which is located on the work order header. If you specify Yes, users can also specify customer priorities in the Shop Floor app.
Material Dispatch Queue VMMATDIS	Prioirty	Specify **Yes** to allow users to select or clear the Priority check box. If you specify Yes, users can also select the check box in the Shop Floor app.
Move Request VMMOVREQ	Prioirty	Specify **Yes** to allow users to select or clear the Priority check box. If you specify Yes, users can also select the check box in the Shop Floor app.

Menu String Program ID	Fields	Notes
Part Maintenance VMPRTMNT	Auto Issue	
	Case Qty	
	Commodity Code	
	Consumable	
	Demand History	
	Part Description	
	Detail Only	
	Eng Master Eng ID	
	Fabricated	
	Inv Tx Locked	
	Kit	
	Pallet Qty	
	Product Code	
	Purchased	
	Stock UM	
	Stocked	
	ToolGOFixture	
	Supply then Leadtime	
	Shipping Weight	
	Weight UM	
Shipping Entry VMSHPENT	Ship Charge Acct	

Menu String Program ID	Fields	Notes
Vendor Maintenance VMVNDMNT	Active Address Line 1 Address Line 2 Address Line 3 City Country Name Remit to Address Line 1 Remit to Address Line 2 Remit to Address Line 3 Remit to City Remit to Country Remit to Name Remit to State Remit to Zipcode State Web URL Zipcode	
WIP Inventory Transaction VMWIPTSF	Adjust In Adjust Out Transfer	

Assigning Sites to Users

Use the Allowable Sites tab to assign sites to users. When you assign a site to a user, the user can use the site when entering data, depending on the other permissions you have set up for the user. The user also has access to the Accounting Entity associated with the site.

To specify a user's allowable sites:

1   Verify that the User ID you want to use is displayed in the User ID field.

2   Click the **Allowable Sites** tab.

3   Click the **Insert** button.

4   Double-click the **Site ID** button and select the site to assign to the user.

5   Click **Save**.

Granting Access to Dashboard Metrics

Use the Dashboard Item Security tab to grant access to Dashboard analytics and detail grids. You can manage access to both system and custom analytics and grids.

To specify the metrics that a user can access:

1   Verify that the User ID that you want to use is displayed in the User ID field.

2   Click the **Dashboard Item Security** tab.

3   All metrics are displayed. Use the check boxes under the table to filter the metrics by type.

4   In the Access column, select the check box to grant access to the metric.

5   Click **Save**.

Granting Access to Queries

Use the VM Query Access tab to grant access to the queries that have been written in the Query Tool. If you deny access to a query, users cannot run it in the Query Tool or from their personal toolbars.

To specify the queries that a user can run:

1   Verify that the User ID that you want to use is displayed in the User ID field.

2   Click the **VM Query Access** tab.

3   In the Access column, select the check box to grant access to the metric.

4   Click **Save**.

Creating Approval Groups

Use approval groups in Purchase Requisition Entry, ECN Maintenance, and Workflow. For Purchase Requisition Entry, you can specify up to four approval groups to evaluate and approve requisitions. For ECN Maintenance, you can set up authorization, implementation, approval, and distribution teams. For Workflows, you can set up groups that must approve steps in a workflow.

If you have more than one site, approval groups are defined by site. When you select a site from the Site ID drop-down menu, the User ID browse table is filtered by the site you select.

To create a group:

1   In the Security section, select **Group**. When you select the Group option, the system displays the Group tab. The other tabs are not available.

2   In the Group ID field, specify a group ID. In the field to the right of the Group ID field, specify a description of the group.

3   Click the **Language ID** drop-down button and select the language that the group uses.

4 If you are licensed to use multiple sites, click the **Site ID** drop-down arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

5 To use the group as a default requisition approval group, select the appropriate **Approval** check box. You can set up the names for the requisition approval groups in Accounting Entity Maintenance. You can override the default and select a different team in Purchase Requisition Entry. You can select more than one Approval check box for the group.

6 To use the group as a default ECN team, select the appropriate check box. If you select one of these boxes, then the system inserts the team in ECN Maintenance. You can override the default and select a different team in ECN Maintenance. You can select more than one check box for the group.

7 To use the group as the default Workflow approval team, select the **WorkFlow Default Group** check box.

8 Select the **Group Signoff** check box if any one member of the group can sign off for the entire group. When you generate tasks for the group, each member of the group receives the task. When one member completes the task, the system marks the task for all group members complete.

If you select the Group Signoff check box, only one member of the group has to complete the task assigned to the group. For example, say ECN123 is assigned to the ECN Implementation Team, which is made up of User1, User2, User3, and User4. When you select the Group Signoff check box, only one of the users in the group needs to complete the task related to ECN123. When one user in the group marks the task Complete, the task is marked complete for the other users.

Clear the check box if each member of the group has to complete assigned tasks or to enable the Sigoff function for only certain group members. When you clear the check box, the system activates the User Signoff check box.

9 Add members to the group. Click the **Insert Row** button, then double-click the User ID browse button. Select a user from the browse table, then click **Ok**.

If you are licensed to use multiple sites, only users assigned to the site in the Site ID field are shown in the browse table.

10 Specify this information for the users:

Leader – If the user is a the group's leader, select the Leader check box. Each group can have only one leader. The leader can view the team members' tasks in Tasks Maintenance.

User Signoff – If you have cleared the Group Signoff check box, the system activates the User Signoff check box. When you select the User Signoff check box for more than one user, one of the selected users can complete the assigned task on behalf of the other selected users. For example, say ECN123 is assigned to the ECN Implementation Team, which is made up of User1, User2, User3, and User4. You have selected User Signoff for User 1, User2, and User3. If User2 completes the task, the system marks User1's and User3's task complete. User4's task, however, remains open until User4 marks the task complete. The group does not complete the task until User4 and one of User1, User2, and User3 marks the task as complete.

11 Click **Save**.

Copying Groups

Use the Copy Group dialog box to copy group information to a new or existing group. You can copy group information within a site only. You cannot copy group information in one site to group information in another site.

To copy a group

1 Select **Edit**, **Copy Group**.

2 In the Site ID field, specify the site where you are copying groups.

3 In the Copy From section, specify the group to copy.

4 In the Copy To section, specify the group to which you are copying information. You can select an existing group or specify a new group ID. If you select an existing group, the existing information is overwritten with the Copy From group information.

5 Click **Ok**. The group information is copied.

Creating Security Profiles

You can create security profiles to act as templates. You can use these templates to streamline the permissions setting process.

If you store macros in your database, you can also assign macros created by the SYSADM user to security profiles. See "Macros" on page 4–26 in the Concepts and Common Features guide.

You can use profiles in two ways. You can assign the profile to the user, or you can copy the profile settings to a user.

When you assign a profile, the user inherits the profile settings, including macros. The settings are not copied to the user's security record. Therefore, when you view a user's security record, the system does not display the security settings that the user inherited from the profile. If you change a profile after you assign it to a user, the user inherits the changes you make.

When you assign multiple profiles to a user, the system applies security settings cumulatively. For menu security and program security, the most restrictive settings are applied. For example, say you assigned Profile 1 and Profile 2 to a user. Profile 1 denies access to the Inventory menu but grants access to all other menus; Profile 2 denies access to the Engineering menu but grants access to all other menus. The user would not have access to either the Inventory menu or the Engineering menu.

For statuses and macros, the least restrictive settings are applied. For example, say you assigned Profile 1 and Profile 2 to a user. Profile 1 grants users the ability to use the Closed purchase order status, but denies permission to all other statuses. Profile 2 grants users the ability to use the Released status, but denies permission to all other statuses. The user would be able to use both the Closed and Released purchase order settings.

When you copy a profile to a user, the user inherits all of the profile settings except for the macro settings. The Status, ECN Status, Menu Security, and Program Security settings are transferred from the profile to the user's security record. Any subsequent changes you make to the profile are not

applied to the user. If you use profiles to assign macros to users, you must assign the profile to the user. If you copy the profile to a user, the user will not have access to the macros associated with the profile.

The process for setting up profiles is similar to the processes for setting up individual users. To create a security profile:

1   In the Security by section, click **Profile**.

2   In the Profile ID field, specify an ID for the profile. Specify a description for the profile in the field to the right of the Profile ID field.

3   Click the **Language** drop-down field and select the language that the profile uses.

4   Click the **Status** tab and specify settings for each document type. For more information, refer to "Setting Information on Status Tabs" on page 3-9 in this guide.

5   Click the **ECN Status** tab and specify settings for ECNs. For more information, refer to "Setting Information on Status Tabs" on page 3-9 in this guide.

6   Click the **Menu Security** tab and specify which menus users with the profile can access. For more information, refer to "Setting Information on the Menu Security Tab" on page 3-10 in this guide.

7   Click the **Program Security** tab and specify security settings for each program. For more information, refer to "Setting Information on the Program Security Tab" on page 3-10 in this guide.

8   The Macros tab is available only If you store macros in the database. Click the **Macros** tab to associate macros with this profile. You can specify any macro created by the SYSADM user. To specify macros:

   a   Click **Insert**.

   b   Double-click the browse button and select the macro.

   c   Click **Ok**.

   See "Storing Macros" on page 4–28 in the Concepts and Common Features guide.

9   Click the **Dashboard Item Security** tab and specify which dashboard metrics users with the profile can access. For more information, refer to "Granting Access to Dashboard Metrics" on page 3-28 in this guide.

10   Click the VM Query Access tab and specify which queries users with the profile can run. For more information, refer to "Granting Access to Queries" on page 3-28 in this guide.

11   Click **Save**.

Assigning Profiles to Users

When you assign profiles to individual users, the user inherits the security settings of the profile, including any macros associated with the profile. You can assign multiple profiles to a single user.

When you assign a user profile to a user, the system does not display the permissions granted by the profile on the individual user's record.

If you change a profile's security settings, the users assigned to the profile inherit the new settings.

To assign a profile to a user:

1 From the Maintain menu, select **User Profiles**.

2 Click the **User ID** browse button to select the user to whom you are applying a profile.

3 Click the **Insert** button.

4 Double-click the **Profile ID** browse button and select the profile to apply to the user.

5 Repeat steps 3 and 4 to assign more profiles to the user.

6 Click **Save**.

Using the Copy User/Profile to... Dialog Box

You can use the Copy User/Profile to... dialog box to perform these tasks.

- **Copy profile security settings from one profile to another profile.** You could use this feature to build profiles for similar roles with different authorities. For example, you could create a profile for an entry-level Accounts Payables professional with access to basic functions. You could then copy this profile to a higher-level profile for the department, then alter the higher-level profile as necessary to reflect the role's authority. If the profile contains macros, the macros not copied to the second profile.

- **Copy profile security settings to User IDs.** The effects of copying a profile to a user are similar to the effects of using the User Profiles feature in the Maintain menu. The advantage of using the Copy function is that you can copy the settings from a user profile to multiple users. The disadvantage of using the Copy function is that you can only copy the settings from one profile to a user. If you copy a second profile to the same user, the second profile overwrites the settings of the first profile. If you change the profile after you copy it to the, the user does not inherit the new profile settings. If the profile contains macros, the macros are not copied to the individual user.

- **Copy security settings from a User ID to a profile ID.** This feature enables you to use a user's security settings as the basis of a profile.

- **Copy security settings from a User ID to other User IDs.** Use this feature to streamline the permissions setting process without creating a profile.

When you use this dialog box, the system copies information from the Status, ECN Status, Menu, and Program tabs only. If you are licensed to use multiple sites, this feature does NOT copy allowable sites information. This feature also does not copy macros.

To copy security settings:

1 In the Copy From section, select the source from which you would like to copy permissions. Do one of these:

- Select the **Profile ID** option, then click the **Profile ID** button and select the profile to copy.

- Select the **User ID** option, then click the **User ID** browse button and select the user permissions to copy.

2 In the Copy To section, select the profile ID or User IDs to which you want to copy the permissions. Do one of these:

- Select the **Profile ID** option, then click the **Profile ID** button and select the profile to which you want to copy settings.

- Select the **User ID** option, then click the **User ID** browse button and select the User ID to which you want to copy settings. You can select multiple User IDs.

3   In the Copy Permissions section, select the items to copy:

Application User Permissions – When you select this check box, the system copies the permission information you set up in the Status and ECN Status tabs.

Menu Permissions – When you select this check box, the system copies the permission information you set up in the Menu tab.

Program Permissions – When you select this check box, the system copies the permission information you set up in the Program Permissions tab. This includes any component and field information you specified.

4   Click **Ok**. The system copies permissions based on the parameters you specified.

Printing Security Reports

You can print a report of security settings for profiles or User IDs. The report displays the security access users or profiles have to modules.

To print the security report:

1   Select **File**, **Security Report**. You can also access the security report from the main Security menu.

2   In the Report by section, click one of these options:

User – Select this option to view the report for User IDs.

Profile – Select this option to view the report for Profiles.

3   Specify this information:

Starting and Ending ID fields – In the Starting Profile or Starting User ID field, click the browse button and select the first User ID or Profile ID to show in the report. In the Ending Profile/User ID field, select the last ID to show in the report. The report will show information for the IDs you specify in the Starting and Ending ID fields, plus all IDs between them. To view all IDs, leave the Starting and Ending ID fields blank.

Starting Module ID and Ending Module ID fields – In the Starting Module ID field, specify the first module to show in the report. In the Ending Module ID field, specify the last module to show in the report. Use the actual program file name without the exe extension. For example, to specify Sales Order Entry, specify VMORDENT. The report will show information for the modules you specify in the Starting and Ending Module ID fields, plus any module that falls between the two alphabetically. To view all modules, leave both fields blank.

4   Select the output for the report:

Print – Select this to view a print preferences dialog box after clicking **Ok**.

View – Select this to view the report on your screen after clicking **Ok**.

File – Select this to save the report to a file after clicking **Ok**.

E-mail – To e-mail the report, select this option. To send the report as a PDF, click the PDF check box. To send the report in Rich Text Format (.RTF), clear the PDF check box.

5   In the Sequence section, select the order for the data in the report. Click one of these options:

By User/Profile ID – The report shows the users or profiles in alphabetical order. The field label changes based on your selection in the Report by field.

By Module ID, User/Profile ID – The report shows the modules in alphabetical order. Within the modules, the report shows the users or profiles in alphabetical order.

By User/Profile ID, Permission Type – The report shows the user or profiles in alphabetical order. For each user or profile, the report shows each permission type in alphabetical order.

6   To view only the components to which users have restricted access, select the **Show Restricted Access Only** check box.

7   Click **Ok**.

Assigning Languages to Users

The SYSADM user can assign languages to all other users in the database. A user with system administrator privileges can assign languages to all other users except the SYSADM user.

Individual users can also select the language that they want to use. See "Choosing a Language" on page 4–2 in the Concepts and Common Features guide.

1 Select **Security**, **Language Assignment**.

2 For each user, select the language to use in the Language ID column. To use the default English translation, leave the Language ID column blank.

3 Click **Save**.

Removing Language Associations

To restore the interface to the default English translation for users:

1 Select **Security**, **Language Assignment**.

2 In the Language ID column, delete the language ID for each user for whom you are restoring the default translation.

3 Click **Save**.

Changing Your Password

You can change your password at any time.

To change your password:

1   Select **Security**, **Change Password**.

2   Specify this information:

Old Password – Specify your current password.

New Password – Specify the new password.

Repeat Password – Specify the new password again.

The characters you enter are replaced with asterisks as you type.

3   Click **OK.**

Using the Signed In Users Maintenance Window

The SYSADM user can use the Signed In Users maintenance window to view all currently signed in users and to sign off inactive users out of the database.

Starting the Signed In Users Window

Select **Admin**, **Signed In Users to start the Signed In Users window**. By default, the information in the table is sorted by User ID and then by Program. To sort the table by a different header, click the header.

Signing Users Out

To sign users out of the database:

1   Select the line that contains the user.

You can select multiple individual lines by holding the CTRL key and selecting the appropriate lines. You can select a group of contiguous lines by clicking the first line and holding the SHIFT key while clicking the last line.

2   Click the **Delete** button. The lines are marked for deletion.

3   Click the **Save** button.

A dialog box is displayed requesting verification of the deletions.

4   Click **Yes**.

The users are signed off when they attempt to save data or run reports. The user can sign back int o the database to resume work.

Setting Up Single Sign On

When you set up single sign on, the credentials that users specify to log on to their domain are also used to log into VISUAL. Users do not need to specify separate credentials to log into VISUAL.

To use single sign on, the user's VISUAL ID and name must match the user's domain ID and name.

Activating Single Sign On

To activate single sign on:

1 Log into the domain.

2 Launch VISUAL.

3 Log in as SYSADM.

4 Select **Security**, **Single Sign On Maintenance.**

5 To enable single sign on for the database, select the **Single Sign On Enabled** check box.

In the Current Windows Domain field, the name of the domain you are logged into is displayed.

6 In the VISUAL User Group field, specify the user group set up for VISUAL on your domain. This field is optional. If you set up a user group for VISUAL users on the domain, specify the group name in this field. If you specify a value in this field, the user must be a member of the group to log into VISUAL.

7 In the SSIDs and Logins table, all current VISUAL database users are displayed. To activate a user, click the appropriate row, then click **Activate User**. The user's current domain name, Windows user SID, domain user SID are displayed. If you specified a VISUAL User Group and this user is a member of the group, the Visual User Group SID is also displayed.

If you do not activate a user, the user must sign in to VISUAL manually.

8 Click **Save**.

Setting Up the Client

To set up the client machine to use single sign on, either add -SSO to the target in the shortcut to VM.exe or add the SingleSignOn=Y value to the VIsualMfg section of the VISUAL.ini file.

Adding -SSO to the Shortcut

To add -SSO to the shortcut:

1 Right-click the shortcut and select **Properties**.

2 In the Target field, add -SSO after the executable path.

3   Click **Ok**.

Adding SingleSignOn to the VISUAL.ini File

To enable single sign on for the client using the VISUAL.ini file:

1   Navigate to the VISUAL.ini file and open it in a text editor.

2   Add this line to the VisualMfg section in the VISUAL.ini file:

   `SingleSignOn=Y`.

3   Select **File**, **Save**.

Logging on as SYSADM when Single Sign On Is Enabled

Unless SYSADM is a user name in your domain, you must use a command line argument to log into VISUAL as SYSADM.

If you use a shortcut, you can add the command line argument to the shortcut path.

1   Right-click the shortcut and select **Properties**.

2   In the Target field, add -SYSADM after the executable path.

3   Click **Ok**.

You can also send a command line argument using Windows Run feature.

To send a command line argument using the Run feature:

1   Click the Windows Start button and select **Run...**.

2   Specify the path to VM.exe, then append -SYSADM

3   Click **Ok**.

You can then log in as the SYSADM user.

Since only the SYSADM user can disable single sign on, you must use the command line argument to log into VISUAL to disable single sign on.

Disabling Single Sign On

To disable single sign on, you must log in as the SYSADM user as described in "Logging on as SYSADM when Single Sign On Is Enabled." After you log in as SYSADM, select **Security**, **Single Sign On Maintenance**. Clear the **Single Sign On Enabled** check box.

After you disable single sign on in VISUAL, disable the feature on each client. Depending on how you set up the client, do one of these tasks:

- Remove the -SSO argument from the shortcut.
- Remove the SingleSignOn=Y entry from the VISUAL.ini file, or set the value to N.

After you disable Single Sign On, users must supply credentials to log into VISUAL.

Using a Domain Controller Attribute to Enable Single Sign On

Optionally, you can use a domain controller attribute to enable single sign on. If you choose this method, proceed with caution. Changing the active directory can have serious consequences. Do not use this method unless you are fully qualified to administer your company's domain.

If you choose this method, add this custom attribute:

vmssoenabled

The attribute must either be a boolean or a case insensitive string. Add the attribute at the top level of your domain. If you use a boolean attribute, specify the value as Y. If you use a case insensitive string attribute, specify the value as yes.

Chapter 4: Individual Privacy

This chapter includes these topics:

What is Individual Privacy?

Use the Individual Privacy program to help your company comply with the European Union General Data Protection Regulation (GDPR). The intent of GDPR is to give individuals more control over their personal data. Upon request, an organization is required to provide a copy of an individual's personal data stored in the organizations database.

You can use the Individual Privacy program to complete these tasks:

• Search for the name of an individual data subject in your database

• Generate the Individual Privacy report that can be sent to the data subject

• Redact a data subject's information

• Monitor Individual Privacy program usage

Terminology

These terms are used in this chapter:

Data subjects – Data subjects are individuals about whom you store data. Data subjects can request a copy of their data and also request that their data be removed.

Data controller – Data controllers are entities that hold data about data subjects. Since your VISUAL database can hold information about data subjects, your company is a data controller.

GDPR Compliance Overview

This table shows an overview of how you can use VISUAL to help you to comply with components of the GDPR:

Product Capability	GDPR Reference	What We Do
Access	GDPR, Article 15	Data Controllers can access data on behalf of the Data Subjects and generate reports to provide information to the Data Subject as required.
Rectification of Inaccuracies	GDPR, Article 16	Data Controllers can update data on behalf of the Data Subjects.
Permanent Erasure	GDPR, Article 17	Data Controllers can permanently erase or remove Data Subject data through removal processes within the application.

Product Capability	GDPR Reference	What We Do
Restriction of & Objection to Processing	GDPR, Articles 18 and 21	Data Controller can inactive Data Subject information and through security measures prevent the processing of Data Subject information.
Data Portability (Machine-Readable Formats)	GDPR, Article 20	Data Controller can print reports or export Data Subject data in machine readable format - csv.
Automated decision-making	GDPR, Article 22	Not a function or purpose of VISUAL.
Data Return or Deletion	GDPR, Article 28	Data Controller can return data in printed or machine reportable format and delete Data Subject data.
Technical & Organizational Security Measures	GDPR, Article 25	Data Controller can secure application access by user login and passwords are encrypted
Consent	GDPR, Article 7	There is no data processing activity that requires consent.

Manual Redaction

The Individual Privacy program is a tool that you can use to help you redact personal data from your database. However, the program does not search all areas of the database that could contain personal information. You may need to manually delete data through the standard VISUAL interface.

See "Individual Privacy Program Limitations" on page 4–26 in this guide.

Individual Privacy Program Security

You can restrict access to the Individual Privacy program through Security Maintenance. We recommend that you limit the number of users who can access the program.

See "Using the Security Maintenance Window" on page 3–8 in this guide.

Finding Data Subject Information

The Individual Privacy program contains a field where you enter a data subject's name. You can specify all or part of the name.

When you click **Refresh** or tab out of the Individual ID field, the program searches for the data subject's name in database tables that store these types of data: Contact, Customer, Employee, Sales Rep, and Vendor. The program searches for the data subject based on a combination of the first name and last name. You can enter the first few characters of the name. For example, to search for John Smith, you could enter JO. This table shows the database tables that the program searches:

Data Group	Database Tables
Contact	CONTACT EQUIPMENT UNP_MNT_CALLS If you use the database with Infor VISUAL CRM , then these tables are also searched: V_CONTACT V_HISTORY
Customer	CARRIER CUSTOMER CUSTOMER_BANK CUSTOMER_CONTACT CUSTOMER_GROUP CUSTOMER_ORDER CUST_ADDRESS QUOTE RMA IBT IBT_RECEIVER IBT_SHIPPER If you use the database with Infor VISUAL CRM , then this table is also searched: V_ACCOUNT
Employee	EMPLOYEE
Sales Rep	SALES_REP

Data Group	Database Tables
Vendor	CASH_DISBURSEMENT PURC_REQUISITION PURCHASE_ORDER RFQ_VENDOR SHIPTO_ADDRESS VENDOR VENDOR_ADDRESS VENDOR_BANK VENDOR_REMIT_ADDRESS VENDOR_CONTACT VENDOR_GROUP

No other database tables are searched.

The search results are displayed in the table sorted by Data Group. You can sort the table by any of the columns, and you can filter the table by data group.

After you run a search, you can generate a report about a data subject and redact a data subject's information.

Searching for a Data Subject

To search for a data subject:

1   Select **Admin**, **Individual Privacy**.

2   In the Individual ID field, specify the search text. You can enter all or part of the data subject's name.

3   Press **Tab** or click the **Refresh** button. The Individual Privacy program searches for your text in tables that store these types of data: Contact, Customer, Employee, Sales Rep, and Vendor. The program searches for the data subject based on a combination of the first name and last name. You can enter the first few characters of the name. For example, to search for John Smith, you could enter JO. For a complete list of the tables that are searched, see "Finding Data Subject Information" on page 4–4 in this guide.

The search results are inserted in the table sorted by Data Group. You can use the Data Group check boxes to filter the results. To sort the table by a different column, click the column's header.

To export the results to Microsoft Excel, select **File**, **Send to Microsoft Excel**.

Individual Privacy Report

The Individual Privacy report contains this information:

- The data group where the data subject's data was found
- The primary key of the document that contains the data subject's data
- The data subject's name
- The data subject's address
- The data subject's phone number
- The data subject's email

You can generate the report for more than one data subject. If the data subject's information is used on multiple documents in your database, you can include multiple documents in the report.

Generating the Individual Privacy Report

You can generate the report in PDF or CSV format and send it to the data subject.

To generate the report:

1 Select **Admin**, **Individual Privacy**.

2 In the Individual ID field, specify the search text. You can enter all or part of the data subject's name.

3 Press **Tab** or click the **Refresh** button.

4 Select the rows that contain the individuals to include in the report.

5 Select File, Print.

6 Select the output format for the report:

Print – Select this option to send your report to a printer.

View – Select this option to view the report on screen.

File – Select this option to save the report as a CSV (comma separated values) file. After you click **Ok**, you are prompted to provide a file name. The file is stored in the same directory as your VISUAL executables.

E-Mail – Select this option to attach the report to an email as an RTF (Rich Text Format). To attach a PDF (Portable Document Format), select the **PDF Format** check box.

7 Click **Ok**.

Data Redaction

> **Caution:** If you redact a data subject's data, the data cannot be recovered.

When you redact a data subject's data with the Individual Privacy program, text strings are replaced by Xs and dates are set to null. In Contact Maintenance, Gender and Marital Status are set to N.

If your search for a data subject yielded multiple results, you must redact all of the results to remove the data subject's information from the database. For example, if a data subject's name is found in the First Name or Last Name fields in Contact Maintenance and on a customer order, two lines are displayed for the data subject in the Individual Privacy table. To redact the data subject's data from both documents, you must select both lines in the table before selecting Redact Personal Information from the File menu.

This table shows the data that you can redact with the Individual Privacy program:

Interface location	Database table	Redacted columns
Application Global Maintenance, Carriers dialog	CARRIER	ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE COUNTRY CARRIER_COUNTRY_ID
Payables, Payment Entry	CASH_DISBURSEMENT	NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE CASH_DISBURSE_COUNTRY_ID

Interface location	Database table	Redacted columns
Contact Maintenance	CONTACT	FIRST_NAME
		MIDDLE_INITIAL
		MIDDLE_NAME
		LAST_NAME
		ADDR_1
		ADDR_2
		ADDR_3
		CITY
		STATE
		ZIPCODE
		COUNTRY
		PHONE
		PHONE_EXT
		MOBILE
		FAX
		EMAIL
		WEB_USER_ID
		WEB_PASSWORD
		GENDER_CODE
		MARITAL_STATUS
		BIRTH_DATE
		URL_TWITTER
		URL_FACEBOOK
		URL_MYSPACE
		URL_LINKEDIN
		URL_HYVES
		CONTACT_COUNTRY_ID
		SALUTATION
		POSITION
		HONORIFIC

Interface location	Database table	Redacted columns
Customer Maintenance, Shipping Address dialog	CUST_ADDRESS	NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE COUNTRY CUST_ADDR_COUNTRY_ID
Customer Maintenance, Email Documents dialog	CUST_CONT_EML_DOC	CONTACT_EMAIL

Interface location	Database table	Redacted columns
Customer Maintenance	CUSTOMER	NAME
		CONTACT_FIRST_NAME
		CONTACT_INITIAL
		CONTACT_LAST_NAME
		ADDR_1
		ADDR_2
		ADDR_3
		CITY
		STATE
		ZIPCODE
		COUNTRY
		BILL_TO_NAME
		BILL_TO_ADDR_1
		BILL_TO_ADDR_2
		BILL_TO_ADDR_3
		BILL_TO_CITY
		BILL_TO_STATE
		BILL_TO_ZIPCODE
		BILL_TO_COUNTRY
		CONTACT_PHONE
		CONTACT_MOBILE
		CONTACT_FAX
		CONTACT_EMAIL
		CONTACT_POSITION
		CONTACT_HONORIFIC
		CONTACT_SALUTATION
		WEB_USER_ID
		WEB_PASSWORD
		WEB_URL
		CONTACT_PHONE_EXT
		CUSTOMER_COUNTRY_ID
		BILL_TO_COUNTRY_ID

Interface location	Database table	Redacted columns
Customer Maintenance, Customer Banks dialog	CUSTOMER_BANK	NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE COUNTRY CUST_BANK_COUNTRY_ID ACCOUNT_NO IBAN SWIFT
N/A. Information in this table is no longer displayed in the interface. The CUST_CONTACT table is used to show alternate contact information in Customer Maintenance. The CUST_CONTACT table does not contain private data that can be redacted.	CUSTOMER_CONTACT	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_MOBILE CONTACT_FAX CONTACT_EMAIL CONTACT_HONORIFIC CONTACT_POSITION WEB_USER_ID WEB_PASSWORD
Customer Group Maintenance	CUSTOMER_GROUP	NAME BILL_TO_NAME BILL_TO_NAME BILL_TO_ADDR_1 BILL_TO_ADDR_2 BILL_TO_ADDR_3 BILL_TO_CITY BILL_TO_STATE BILL_TO_ZIPCODE BILL_TO_COUNTRY BILL_TO_COUNTRY_ID

Interface location	Database table	Redacted columns
Customer Order Entry	CUSTOMER_ORDER	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION
Employee Maintenance	EMPLOYEE	FIRST_NAME MIDDLE_INITIAL LAST_NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE COUNTRY PHONE EMAIL_ADDR EMPLOYEE_COUNTRY_ID
Equipment Maintenance	EQUIPMENT	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION

Interface location	Database table	Redacted columns
Interbranch Transfer Entry	IBT	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION
Interbranch Receipt Entry	IBT_RECEIVER	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION
Interbranch Shipping Entry	IBT_SHIPPER	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION

Interface location	Database table	Redacted columns
Purchase Requisition Entry	PURC_REQUISITION	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION
Purchase Order Entry	PURCHASE_ORDER	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION

Interface location	Database table	Redacted columns
Estimating Window	QUOTE	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE COUNTRY

Interface location	Database table	Redacted columns
Vendor RFQ Entry	RFQ_VENDOR	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE COUNTRY RFQ_VENDOR_COUNTRY_ID
Return Authorization Maintenance	RMA	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION
Customer Maintenance, Sales Reps dialog	SALES_REP	NAME

Interface location	Database table	Redacted columns
Vendor Maintenance, Shipping Addresses dialog	SHIPTO_ADDRESS	NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE SHIPTO_ADDR_COUNTRY_ID
Unplanned Maintenance	UNP_MNT_CALLS	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION
Vendor Maintenance, Email Documents dialog	VEND_CONT_EML_DOC	CONTACT_EMAIL

Interface location	Database table	Redacted columns
Vendor Maintenance	VENDOR	CONTACT_FIRST_NAME
		CONTACT_INITIAL
		CONTACT_LAST_NAME
		CONTACT_PHONE
		CONTACT_EMAIL
		CONTACT_MOBILE
		CONTACT_FAX
		CONTACT_POSITION
		CONTACT_HONORIFIC
		CONTACT_PHONE_EXT
		CONTACT_SALUTATION
		NAME
		ADDR_1
		ADDR_2
		ADDR_3
		CITY
		STATE
		ZIPCODE
		COUNTRY
		REMIT_TO_ADDR_1
		REMIT_TO_ADDR_2
		REMIT_TO_ADDR_3
		REMIT_TO_CITY
		REMIT_TO_STATE
		REMIT_TO_ZIPCODE
		REMIT_TO_COUNTRY
		VEND_BANK_ACCT_ID
		SOCIAL_SECURITY_NO
		DATE_OF_BIRTH
		STATE_OF_BIRTH
		WEB_URL
		VENDOR_COUNTRY_ID
		REMIT_TO_COUNTRY_ID
		BUYER

Interface location	Database table	Redacted columns
Vendor Maintenance, Purchase Address dialog	VENDOR_ADDRESS	NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE VENDOR_ADDR_COUNTRY_ID
Vendor Maintenance, Vendor Banks dialog	VENDOR_BANK	NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE VENDOR_BANK_COUNTRY_ID ACCOUNT_NO IBAN SWIFT
N/A. Information in this table is no longer displayed in the interface. The VEND_CONTACT table is used to show alternate contact information in Customer Maintenance. The VEND_CONTACT table does not contain private data that can be redacted.	VENDOR_CONTACT	CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME CONTACT_PHONE CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_POSITION CONTACT_HONORIFIC CONTACT_PHONE_EXT CONTACT_SALUTATION

Interface location	Database table	Redacted columns
Vendor Group Maintenance	VENDOR_GROUP	NAME REMIT_TO_NAME REMIT_TO_ADDR_1 REMIT_TO_ADDR_2 REMIT_TO_ADDR_3 REMIT_TO_CITY REMIT_TO_STATE REMIT_TO_ZIPCODE REMIT_TO_COUNTRY REMIT_TO_COUNTRY_ID
Vendor Maintenance, Remit-to Address dialog	VENDOR_REMIT_ADDRESS	NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE VENDOR_REMIT_COUNTRY_ID

If your database contains the tables used with VISUAL CRM , then you can also redact this information with the Individual Privacy program:

CRM interface location	Database table	Redacted columns
Contacts	V_CONTACT	FIRST_NAME
		MIDDLE_INITIAL
		LAST_NAME
		ADDR_1
		ADDR_2
		ADDR_3
		CITY
		STATE
		COUNTRY
		ALT_ADDR_1
		ALT_ADDR_2
		ALT_ADDR_3
		ALT_CITY
		ALT_STATE
		ALT_ZIPCODE
		ALT_COUNTRY
		BIRTH_DATE
		BUS_PHONE
		EMAIL_ADDR
		FAX_PHONE
		HONORIFIC
		HOME_PHONE
		WEB_USER_ID
		WEB_PASSWORD
		NICK_NAME
		GENDER
		SOC_SEC_NBR
		URL
		OTHER_PHONE
		MOBILE_PHONE
		SALUTATION
		PROPER_NAME
		MIDDLE_NAME
		PHONE_EXT
Employee	V_EMPLOYEE	EMAIL_ADDR

CRM interface location	Database table	Redacted columns
History	V_HISTORY	CONTACT_FIRST_NAME CONTACT_EMAIL CONTACT_LAST_NAME
Accounts	V_ACCOUNT	NAME CONTACT_FIRST_NAME CONTACT_INITIAL CONTACT_LAST_NAME ADDR_1 ADDR_2 ADDR_3 CITY STATE ZIPCODE COUNTRY COUNTRY_ID COUNTY_NAME BILL_TO_NAME BILL_TO_ADDR_1 BILL_TO_ADDR_2 BILL_TO_ADDR_3 BILL_TO_CITY BILL_TO_STATE BILL_TO_ZIPCODE BILL_TO_COUNTRY CONTACT_POSITION CONTACT_EMAIL CONTACT_MOBILE CONTACT_FAX CONTACT_HOME CONTACT_HONORIFIC CONTACT_SALUTATION CONTACT_OTHER BUS_PHONE WEB_USER_ID WEB_PASSWORD URL

Redacting Data

> **Caution:** If you redact a data subject's data, the data cannot be recovered.

To redact a data subject's data:

1 Select **Admin**, **Individual Privacy**.

2 In the Individual ID field, specify the search text. You can enter all or part of the data subject's name.

3 Press **Tab** or click the **Refresh** button.

4 Select the rows that contain the data that you want to redact. For example, if a data subject's name is found in the First Name or Last Name fields in Contact Maintenance and on a customer order, two lines are displayed for the data subject in the Individual Privacy table. To redact the data subject's data from both documents, you must select both lines.

If you select a row that contains a Customer, Vendor, or Employee record, then information is redacted from additional tables. This table shows the additional tables from which data is redacted:

Data Group of Selected Row	Redacted Database Tables
Customer	CUSTOMER CUST_CONT_EML_DOC
Employee	EMPLOYEE V_EMPLOYEE (VISUAL CRM databases only)
Vendor	VENDOR VEND_CONT_EML_DOC

5 Select **File**, **Redact Personal Information**.

6 A message is displayed that states that all personal data for the selected rows will be removed. Click **Yes** to continue.

7 The data is redacted, and the rows are removed from the Individual Privacy table.

Data Redaction and BODs

If you are integrated to another application through BODs, an updated BOD is not automatically sent when you redact information. You must trigger BOD updates manually.

Data Redaction and Infor VISUAL for .NET

If you use VISUAL for .NET, data that you redact in VISUAL is also redacted in VISUAL for .NET.

Data Redaction and Third-party Products

The Individual Privacy program works with VISUAL products only. If you use third-party products with VISUAL, you must work with the provider of the product to redact private data.

Monitoring Usage of the Individual Privacy Program

You can view a history of the actions that users have taken in the Individual Privacy Program. You can view this information:

• The primary key of the document on which an action was performed,

• The action taken

• The user who performed the action

• The date that the action was performed

You can print the information to a report.

To monitor usage of the program:

1 Select **Admin**, **Individual Privacy**.

2 Select **File**, **List History.** All actions are displayed sorted by Data Group.

3 Use the fields and check boxes in the header to specify the information to show in the table:

Start Date and End Date – To view actions that took place during a particular time period, specify the date range in the Start Date and End Date fields. To view actions that took place on any date, leave these fields blank.

Data Group – To view actions for a particular data group, select the check box for the data group. To view actions for all data groups, select all check boxes.

Action – To view print actions, select the Printed check box. To view redaction actions, select the Redacted check box.

4 Press **Tab** or click **Refresh**. The actions that match your search criteria are displayed.

5 By default, the table is sorted by the Data Group column. To sort the table by a different column, click the column's header.

6 To generate a report that includes the information in the table, select the output format and then click **Print**:

Print – Select this option to send your report to a printer.

View – Select this option to view the report on screen.

File – Select this option to save the report as a text file.

E-Mail – Select this option to attach the report to an email as an RTF (Rich Text Format). To attach a PDF (Portable Document Format), select the **PDF Format** check box.

Individual Privacy Program Limitations

The Individual Privacy program searches for a data subject's name in the FIRST_NAME, LAST_NAME, and NAME columns in the tables listed in "Finding Data Subject Information" on page 4–4 in this guide. If a data subject's name is stored in any other database column, you must search for and remove the data subject's name manually.

The Individual Privacy program redacts only the data displayed in the table in "Data Redaction" on page 4–7 in this guide. No other data is redacted.

The Individual Privacy program does not search for nor redact information in these areas:

- Database User IDs
- Primary keys, such as employee IDs, customer IDs, and vendor IDs
- Data in the HISTORY_DATA table
- Data in VISUAL reporting tables. You must manually reload the reporting tables after you redact data. See "Manually Loading Existing Data into the Reporting Database Tables" on page 2–14 in this guide.
- Database views
- Notations
- Specifications
- Document Attachments
- Activities
- Pictures
- User-defined fields
- Custom tables or custom columns in standard tables
- BOD in-box and out-box database tables
- Fields that could contain a person's name, such as Planner User ID and Buyer User ID fields in Part Maintenance or the Engineered By field in the Manufacturing Window

In addition to the areas in the above list, other areas of the VISUAL database could contain personal information that you must search for and redact manually.

Data Privacy Best Practices

To make complying with GDPR easier, we recommend these best practices:

- Do not use an individual's name or other personal information as the primary key for an employee, customer, vendor, sales rep, or other document. Primary keys must be retained in the database and cannot be redacted. If you have used an individual's name as part of a primary key and need to redact it, contact your channel partner for information about a rename and merge tool.

- If you store document attachments that contain personal data, we recommend that you designate that the attachments contain personal data. For example, you could use a code in the file name or store the attachments in a dedicated folder.

Chapter 5: Customizing VISUAL

This chapter contains this information:

Setting Up Application Preferences

Use Preferences Maintenance to control display sizes, default values, default views, and other aspects of applications. The SYSADM user can set these values both globally and for individual users.

If you are upgrading from a 6.5.x or earlier version of VISUAL, Preference Maintenance replaces most of the settings in the VISUAL.ini file and individual application .ini files. Certain settings needed to launch Infor VISUAL, such as log in information, remain in the VISUAL.ini file. You should not edit the entries in the VISUAL.ini file.

Many of the Preference Maintenance preferences can also be set in the individual applications.

If you would like to limit access to Preference Maintenance, use Program Security to restrict user access.

If you change the preferences of a user who is currently logged in, the changes do not take effect until the user logs out then logs back in. Likewise, if you change your own preferences, the changes do not take effect until you log out and then log back in.

Accessing Preference Maintenance

Select **Admin**, **Preference Maintenance**.

You can use the Preference Maintenance window to:

• Load any existing preference values from the VISUAL.ini file
• Set global preferences
• Set preferences for individual users
• Set up preference profiles and apply them to individual users
• Set up scheduling preferences
• Print a list of global and individual user preferences

Loading Values from the VISUAL.ini File

You may find it useful to load the values already set in the VISUAL.ini file into the Preference Maintenance table.

When you load values, the system first looks at the VISUAL.ini file in the directory where you installed VISUAL. If the system does not find the VISUAL.ini file in the install directory, it will look in your local VISUAL directory.

To load values:

1   Select **Maintain**, **Load Preferences**.

2   Click **Begin**.

If you run the Load Preferences utility multiple times, the system loads only the values that have been added to the VISUAL.ini file since the last time you ran the Load Preferences utility.

Editing the VISUAL.INI file

To edit the VISUAL.ini file, make a backup copy, and then use a text editor like Notepad.

For example, if you wanted to configure semaphore use in VISUAL you would add the following section to the end of the VISUAL.INI file in your application directory:

```
[Semaphore]
Engineering=N
WorkOrder=N
Inventory=N
Labor=N
Mrp=N
Receivables=N
Payables=N
Ledger=N
PurchaseOrder=N
CustomerOrder=N
Scheduling=N
Costing=N
Estimating=N
NextNumber=Y
EventDetect=N
Project=N
```

Default Preferences

The system administrator can set up default preferences that are applied to all VISUAL users.

When the system administrator sets up default preferences, the system administrator can specify that a preference is global. A global preference is a required preference. Individual users cannot override a global preference setting. When individual users set up preferences, required preference settings are displayed in red.

If the system administrator specifies that a default preference is not a global preference, then individual users can specify a different value for the preference setting. If an individual user specifies a different value than the default value, then the value is displayed in blue.

Adding Default Preferences

You must sign in as the SYSADM user to perform this procedure.

To add default preferences:

1   Select **Admin**, **Preferences Maintenance**.

2   Click the User ID drop-down button and select ****Tenant****.

3   To add a preference entry to section that you already use in Preferences Maintenance, place your cursor in the section and then click the **Insert** button. To add an entry to a section that you do not already use, place your cursor anywhere and then click the **Insert** button. In the new row, erase the name of the section.

4   Double-click the **Entry** browse button to select an entry. The system does one of the following:

   •   If you specified a Section name, the system displays a list of valid entries for the section.

   •   If you did not specify a section name, the system lists all available sections and entries.

   In both cases, the entry browse lists acceptable values for each entry and a description of the entry and its values. Make note of the value so you can enter it in the Preference Maintenance table. After you select an entry, click **Ok**.

5   Type in the value you would like to use in the Value column. Be careful to enter an acceptable value. The system does not check to see if your entry is valid. If you do not enter an acceptable value, the system may not behave in the manner you expect.

6   To specify that the preference is a required preference, select the **Global** check box. Individual users cannot override global preferences. If this preference is not a required preference, clear the **Global** check box. If you clear the Global check box, individual users can specify their own values for this preference setting.

7   To activate this preference, select the **Active** check box. If this preference is not active, then clear the **Active** check box. If you clear the Active check box, the system's default behavior is used.

8   Click the **Save** button. The current date is inserted in the Modify Date column.

Adding Preferences for Individual Users

You must sign in as the SYSADM user to perform this procedure.

The SYSADM user can set up preferences for individual users. To set up a user's preferences:

1   Select **Admin**, **Preferences Maintenance**.

2   Click the User ID drop-down button and select the user for whom you are setting up preferences.

3   Click the **Insert** button.

4   Double-click the **Entry** browse button and select an entry. The Entry browse lists the area of the application that the preference affects. The Entry browse also lists acceptable values for each entry and a description of the entry and its values. Make note of the value so you can enter it in the Preference Maintenance table. After you select an entry, click **Ok**.

If you know the Section associated with the entry, you can enter the section first, then click the **Entry** browse button. If you enter the Section first, the browse table shows only the entries for the section you specify.

5   In the Value column, specify the value for the Section and Entry. You must enter an acceptable value. Your entry is not validated. If you do not enter an acceptable value, the system may not behave in the manner you expect.

If the value text is red, then the preference setting is a required default setting. You cannot change the value.

If the value text is blue, then a default setting exists for the preference, but the default setting is not required. The blue text indicates that the value you specified does not match the default value. The override setting that you specified is used for the preference.

6   Click **Save**.

Editing Existing Preferences

To edit a preference:

1   Select **Admin**, **Preferences Maintenance**.

2   If you are the SYSADM user, select the ID of the user for whom you are editing preferences.

3   To search for a preference in a particular section, click the **Section Filter** drop-down button and select the section that contains the preference that you are editing.

4   In the Value column, specify a new value.

5   Click **Save**.

Deleting a Preference

To delete a preference:

1   Select **Admin**, **Preferences Maintenance**.

2   If you are the SYSADM user, select the ID of the user for whom you are deleting preferences.

3   To search for a preference in a particular section, click the **Section Filter** drop-down button and select the section that contains the preference that you are editing.

4   Select the row that contains the preference to delete, and then click the **Delete Row** button.

5   Click **Save**.

Setting Up Scheduling Preferences

If you are licensed to use multiple sites, the SYSADM user can set up scheduling preferences at the tenant level, for each site, and for each schedule.

You can also set up schedule preferences in the Concurrent Scheduler window.

To set up scheduling preferences:

1   Select **Admin**, **Preferences Maintenance**.

2   Click the **User ID** arrow and select one of these options:

   SYSADM~ – Select this option to specify tenant-level scheduler settings. Ensure that you select the SYSADM~, not SYSADM. If you create a new site, the settings you specify for the tenant level are applied to schedules in the new site.

   SYSADM~[Site ID] – Select this option to specify site-level scheduler settings. [Site ID] is replaced with the ID of your site. If you create a new schedule for the site, the settings you specify for the site are applied to the schedule.

   SYSADM~[Schedule ID] – Select this option to specify schedule-specific settings.

3   Click the **Insert** button.

4   In the Section column, specify Scheduler.

5   Click the **Entry** browse button and select the preference to set up.

6   In the Value column, specify the appropriate preference value.

7   Click **Save**.

Creating Preference Templates

Note: Only the SYSADM user can perform this procedure.

In Preference Maintenance, a User ID does not necessarily correspond to a database user. The system administrator can create user templates that can be applied to actual database users. For example, if all sales representatives should have the same preference settings, the system administrator can set up a preference user ID named SALES REP, then apply the SALES REP preferences to the appropriate database users.

To create a preference template:

1   Select **Edit**, **Copy Preferences**.

2   Click the **Copy From** drop-down button and select the user whose preferences you would like to copy.

3   In the Copy to User ID field, specify the name for the profile.

4   Click **Copy**.

5   Edit the preferences as necessary.

Copying a Preference Template to a User

After you create a preference template, you can copy the template settings to a user. When you copy a template to a user, the user inherits the preferences in the template. You can then edit the individual user's preferences as necessary.

You can assign a preference template only to a user that has no preferences specified. To copy a template to a user that has preferences set, you must first delete all of the user's preferences. For more information, refer to "Deleting All Preferences from a User or a Template" on page 5-7 in this guide.

To copy a preference profile to a user:

1   Select **Edit**, **Copy Preferences**.

2   Click the **Copy From** drop-down button and select the template to copy.

3   In the Copy to User ID field, specify the ID of the user.

4   Click **Copy**.

Deleting All Preferences from a User or a Template

To delete all preferences from a user:

1   Select **Edit**, **Delete User Preferences**.

2   Click the drop-down button and select the user or template to delete.

3   Click **Ok**.

The system removes the user or template from Preferences Maintenance. If you deleted a database user, the user ID is removed from Preferences Maintenance only. The user ID is not removed from the database.

Printing a Preference Report

To print a list of preference settings:

1   Select **File**, **Print Preferences**.

2   Specify the starting user ID and ending user ID to show in the report. The preferences for the two user IDs you specified is shown, plus all user IDs that occur between the two IDs. To view all user ID preferences, leave both fields blank.

3   Click the drop-down menu to select the output method for the report.

4   Click **Ok**. The system prints a list of preferences.

Customizable User Defined Fields

Use Customizable User Defined Fields to create columns in tables and tabs on windows to capture information specify to your enterprise. The fields you create are stored in the database and can be used for reports.

Any user with System Administrator privileges can create and edit customizable user defined fields.

This table shows which programs support customizable user defined fields and the type of user defined information you can create. If a type of user-defined information is not available in a program, the appropriate Insert button is not available. For example, if you are adding user-defined information to Customer Maintenance window, you are not given the option to add a Delivery Schedule or Line Item user-defined field, since that type of information does not apply to the Customer Maintenance window.

Program	Located on Menu	Type of Customizable UDF
VFAPIENT – Accounts Payable Invoice Entry	Edit	Tab & Line
VFARIENT – Accounts Receivable Invoice Entry	Edit	Tab & Line
VFGLTENT – General Journal Entry	Edit	Tab & Line
VMCUSMNT – Customer Maintenance	Maintain	Tab
VMDOCMNT – Document Maintenance	Maintain	Tab
VMECNENT – Engineering Change Entry	Edit	Tab & Line
VMEQMNT – Equipment Maintenance	Edit	Tab
VMESTWIN – Estimating Window	Edit	Tab & Line
VMIBTENT – Interbranch Transfer Entry	Edit	Tab & Line
VMIBTRCV – Interbranch Transfer Receipt Entry	Edit	Tab & Line
VMIBTSHP – Interbranch Transfer Shipping Entry	Edit	Tab & Line
VMMFGWIN – Mfg Window – Operation Card	Edit	Tab
VMMFGWIN – Mfg Window – Material Card	Edit	Tab
VMMFGWIN – Mfg Window – Leg Card	Edit	Tab
VMORDENT – Customer Order Entry	Edit	Tab, Line, & Delivery Schedule
VMORDWIN – Customer Order Window	Edit	Tab, Line, & Delivery Schedule
VMPRJMNT – Project Maintenance	Maintain	Tab

Program	Located on Menu	Type of Customizable UDF
VMPRTMNT – Part Maintenance	Maintain	Tab
VMPURENT – Purchase Order Entry	Edit	Tab, Line, & Delivery Schedule
VMREQENT – Purchase Requisition Entry	Edit	Tab, Line, & Delivery Schedule
VMRESMNT – Shop Resource Maintenance	Edit	Tab
VMRFQENT – Vendor RFQ Entry	Edit	Tab & Line
VMRMAENT – Return Material Authorization	Edit	Tab & Line
VMSHPENT – Shipping Entry	Edit	Tab, Line, & Delivery Schedule
VMSRVENT – Outside Service Maintenance	Maintain	Tab
VMUPMNT – Unplanned	Edit	Tab
VMVNDMNT – Vendor Maintenance	Maintain	Tab

If you are creating User Defined Fields on Tabs, you can specify up to six fields on each tab. To create additional fields, you must create an additional tab name first. Refer to step 5, below.

You can create a total of 40 Customized User Defined Fields per window.

To set up Customized User Defined Fields:

1 Start the program in which you are setting up UDFs.

2 If you are using Part Maintenance, Outside Service Maintenance, or Shop Resource Maintenance and you are licensed to use multiple sites, specify **Tenant** in the Site ID field.

3 Select Customizable UDFs from the Maintain or Edit menu.

4 Click one of these buttons:

- To set up a tab field, click the Insert Tab UDF toolbar button

- To set up a Line Item UDF, click the Insert Line Item UDF toolbar button.

- To set up a Delivery Schedule UDF, click the Insert Delivery Schedule UDF toolbar button.

Depending on the window, some of the Insert buttons are unavailable.

5 Specify this information:

Label – Specify the name of the field.

Tab/Table – If you clicked the Insert Tab UDF button, click the drop-down button to select the existing user-defined tab where you want to place the field. To place the field on a new tab, specify a new tab name in the Tab field.

If you clicked the Insert Line Item UDF button or the Delivery Schedule UDF button, the system displays the name of the table where your UDF will appear in the Table field. You cannot change the name of a table.

Seq No - Specify where to display the field. For Tabs, the system displays fields in ascending order; the field with the lowest sequence number appears at the top of the tab, followed by the field with the next lowest sequence number and so on. For Lines and Delivery Schedules, the system inserts the user-defined columns after the last column in the table. The field with the lowest sequence number is first, followed by the field with the next lowest sequence number and so on.

Data Type - Choose one of these data types:

String - Use this type of data to record alphanumeric data. You can use up to 10 string type fields per window.

Number - Use this type of data field to record numeric data. You can use up to 10 number type fields per window.

Boolean - Use this type of data field to create a check box that users can select or clear. You can use up to 5 Boolean type fields per window.

Date/Time - Use this type of data field to record date and time. You can use up to 5 date type fields per window.

String List - Use this type of data field to prompt users to select from a list of alphanumeric data. You can use up to 10 string list type fields per window.

Uniform Resource Locator – Use this type of data field if you want users to enter a URL. You can use up to 5 URL type fields per window.

Required - To require users to enter data into the field, select the Required check box. The record is not saved unless users enter data in all required fields.

As you enter values in the dialog box header, information is inserted in the table.

6   If you selected String List in the Data Type field, the Database and List check boxes are activated. Use these check boxes to define the type of list to use.

You can create three types of lists: database, static, and dynamic. In a database list, the drop-down list is populated with values from a database table and column that you specify. In a static list, users select from options you define. In a dynamic list, the drop-down list is populated with values that have previously been entered for the field.

Database - To create a database list, select this check box. When you select the Database check box, the Set Column button becomes available. Click the Set Column button to choose the database table and column to use to populate the string list. In the Set Database Column dialog box, specify this information:

Table - Click the Table drop-down button to select the database table that contains the column you would like to use.

Column - Click the Column drop-down button to select the column to use.

After you specify a Table and Column, click **Ok** to exit the Set Database Column dialog box.

List - To create a static list, select this check box. When you select the List check box, the Set List button becomes available. Click the Set List button to define the choices that will be available for users to select. In the Set Static String List dialog box, click the Insert button to enter an alphanumeric value. Insert as many values as you need. When you are finished inserting values, click the Save button.

To create a dynamic list, clear both the Database and List check boxes. The list of values is compiled from values previously entered in the field. Users can enter any value in a dynamic list field; they do not have to select from the list.

7   If you specified the Uniform Resource Locator data type, enter the prefix to use in the URL Protocol field. The prefix is attached to the URL the user specifies. For example, if you would like users to enter a website, enter http:// in the URL Protocol field. If a user enters www.infor.com in your user defined field, the http:// prefix is added automatically.

8   When you have finished setting up your Customizable UDFs, click the Save toolbar button.

The system displays the customizable UDFs when you have closed the User Defined Field Maintenance [program name] dialog box.

Using Customizable User Defined Fields

Reports

If you have set up Customizable User Defined Fields for a program, you can use those fields in associated reports.

To use the Customizable UDF fields in reports, modify the report (QRP) you want to use to accept the appropriate fields.

For Tabs, the input object names for your reports are:

- UDF_STRING1 through UDF_STRING10
- UDF_NUMBER1 through UDF_NUMBER10
- UDF_BOOLEAN1 through UDF_BOOLEAN5
- UDF_DATE1 through UDF_DATE5
- UDF_STR_COMBO1 through UDF_STR_COMBO10
- UDF_URL1 through UDF_URL5

For Line Items, the input object names for your reports are:

- UDF_COL_STRING1 through UDF_ COL_STRING10
- UDF_ COL_NUMBER1 through UDF_ COL_NUMBER10
- UDF_ COL_BOOLEAN1 through UDF_ COL_BOOLEAN5
- UDF_ COL_DATE1 through UDF_ COL_DATE5
- UDF_COL_STR_COMBO1 through UDF_COL_STR_COMBO10
- UDF_COL_URL1 through UDF_COL_URL5

For Delivery Schedules, the input object names for your reports are:

- UDF_COL_DEL_STRING1 through UDF_COL_DEL_STRING10
- UDF_COL_DEL_NUMBER1 through UDF_COL_DEL_NUMBER10
- UDF_COL_DEL_BOOLEAN1 through UDF_COL_DEL_BOOLEAN5

- UDF_COL_DEL_DATE1 through UDF_COL_DEL_DATE5
- UDF_COL_DEL_STR_COMBO1 through UDF_COL_DEL_STR_COMBO10
- UDF_COL_DEL_URL1 through UDF_COL_DEL_URL5

The names you assign for your Customizable User defined fields do NOT correspond to the names you use for your reports.

Macros

If you have set up Customizable User Defined Fields for a program, then you can use Customizable UDF fields and columns in macros in the same manner as other fields and columns.

To use customizable UDFs in macros, use the macro editor dialog in the application and add them the same way as other fields and columns. In the Available Fields combo box you will find these new references:

Fields

- udfString1 through udfString10
- udfNumber1 through udfString10
- udfBool1 through udfBool5
- udfDate1 through udfDate5
- udfStrCombo1 through udfStrCombo10
- udfURL1 through udfURL5

Columns

- udfStringCol1 through udfStringCol10
- udfNumberCol1 through udfStringCol10
- udfBoolCol1 through udfBoolCol5
- udfDateCol1 through udfDateCol5
- udfStrComboCol1 through udfStrComboCol10
- udfURL1 through udfURL5

Browsing by SQL Statement

If you have set up Customizable User Defined Fields for a program, then you can include those Customizable UDF fields in your search by SQL filter.

Creating Report Format File Overrides

Only the SYSADM user can specify report format file overrides.

Reports are made up of two parts: the report format and the report data. The report format is determined by a QRP file. Over 700 QRP files are provided in a typical installation of VISUAL. The report data are determined by the programs used to generate reports.

You can customize any QRP in these ways:

*   Choose which data inputs are displayed on the report
*   Define the layout, including margins, fonts, and pagination
*   Add a company logo and other static information
*   Use formulas to combine data inputs into new pieces of information
*   Write queries to extract information from the database.

To customize QRPs, use a reporting tool that can read the QRP format, such as Unify Report Builder. Refer to your reporting tool documentation for complete information on how to use the tool.

When you customize a QRP, you can choose to overwrite the original QRP. If you overwrite a QRP, make a copy of your customized QRP and store it in a safe location before you install any VISUAL updates. Your customized QRP may be overwritten by the update.

You can also set up report format overrides. Rather than changing the standard files, you specify that an override should be used in place of the standard file. This makes the process much easier to manage; when additional software upgrades are performed, your customized forms will not be over-written. You can also choose to create a report format override for a single user, a particular site, or a particular entity.

To customize reports using report format file overrides:

1   Select **Maintain**, **Report Format File Overrides**.

2   Click **Insert.**

3   Specify this information:

Standard QRP filename – Double-click the browse button and select the standard QRP file to override. To determine the standard QRP file name, run the report using the View output option. The file name of the QRP is displayed in the title bar.

Context – Specify when the override should be used. Click one of these options:

User – If the override is specific to a single user, click this option. When you click this option, the User ID field is displayed. Specify the User ID in the field. After you save the override row, User ID: plus the name of the user you specified in inserted in the Context column.

When you specify a user override for a particular report file, the override is always used for the user, even if you have also specified an override for any other context.

Site – If you are licensed to use multiple sites, click this option if the override applies to a particular site. When you click this option, the Site ID field is displayed. Specify the Site ID in the Site field. After you save the override row, "Site:" plus the name of the Site you specified is inserted in the Context column.

When you specify a site override for a particular report file, the override applies when the site is used, unless you have defined a user-specific override for the same file.

Entity – If you are licensed to use multiple entities, click this option if the override applies to a particular accounting entity. When you click this option, the Entity ID field is displayed. Specify the Accounting Entity in the Entity field. After you save the override row, "Entity:" plus the name of the Accounting Entity you specified is inserted in the Context column.

When you specify an entity override for a particular report file, the override applies when the accounting entity is used, unless you have defined a user-specific or site-specific override for the same file.

Always – If you click the Always context, the override you specify is always used, unless you have specified a user override, site override or entity override for the same report file.

Overriding QRP Filename – Double-click the browse button and navigate to the override file.

If the file you specify does not exist, you are prompted to create the new file by copying the standard file. It is recommended that you always customize a report template by copying the original and then modifying it. The original report file contains the definition of all the inputs and report sections. Recreating this information can be tedious.

You can store your override files in the same directory as your VISUAL executables, but you may find it easier to manage your override files if they are stored in a separate directory.

Note: While the standard file is only referenced by name, you must specify the full directory path to the override file.

Description – Specify a description of the override.

4   Click **Save**.

Adding an Extended Query

You can add an extended database query to the customer report. You can use extended queries to add information from the database to your customized reports.

1   Select the report in the table.

2   Click **Add Extended**.

3   Enter a SQL statement in the multi-line text field.

You need to create a SQL statement to retrieve the data. For example, this SQL statement will select the information stored in the column BACKFLUSH_WHS_ID in the Part table:

SELECT BACKFLUSH_WHS_ID FROM PART WHERE PART.ID=:PART ID

Notice the period (.) between **PART** and **ID** and the colon (:) after the equal sign (=). Syntax is important when entering SQL statements; be careful when entering them.

4   In the Destination variables section, specify this information:

Name – Specify the name of the variable.

Type – Click the Type drop-down box and select the type of data. You can select **String**, **Date/Time**, or **Number**.

5   Click **Add to List**.

6   Click **Ok**.

Comparing a Customized Report to a Standard Report

You can compare a customized report to a standard report to view changes made to the report inputs.

To compare reports:

1   Select the report row in the table.

2   Click **Compare**.

3   The dialog box shows the differences between the inputs for the standard report and the customized report. To restore all customized data input to the standard, click **Match to Standard**.

4   Click **Close**.

Customizing VISUAL Windows

Using Gupta Technologies® Object Nationalizer, you can create and modify screen overlays for most of your VISUAL windows. When you start a program, the system checks for the existence of an overlay for that program. If an overlay exists, the program is started with the overlay.

By developing custom overlays for your VISUAL windows, you can change windows to better fit your needs or the needs of specific departments within your company. For example, if you are working in the Customer Maintenance window and do not want your employees to be able to view customer credit amounts, you could create an overlay that hides the credit amount and any other field you see fit to hide.

Creating Screen Overlays

Before you can use an overlay you must use Object Nationalizer to create the .txt overlay file. After you have created the .txt file you can use any standard text editor to make further changes.

Note: If you use the Edit Windows dialog to open the Object Nationalizer and make changes, the Object Nationalizer will create a new .txt overlay overwriting the previous one or a new overlay with a different name, which VISUAL cannot use: the .txt file name must be the same as the VISUAL program name.

To create screen overlays:

1   Select **Admin**, **Window Editor**.

The Edit Windows dialog box shows all windows eligible for editing.

A check box is displayed next to the windows you have already edited.

2   Select the window for which you want to create an overlay and click **Ok**.

The name of the program for which you are creating an overlay is shown in the title bar.

3   Make the changes to the window and select the **Save As** option from the File menu. Save your overlay as a text (.txt) file using the same name as the VISUAL program. For example, if you created an overlay for VMPRTMNT.exe, save the overlay file as VMPRTMNT.txt in the same directory as VMPRTMNT.exe.

Because your original VISUAL program will be overwritten, do NOT save your changes using an executable (.exe) file extension.

Depending on the speed of your computer and the program for which you are creating an overlay file, the conversion and save process may take up to one hour.

4   When you have finished saving your overlay file, close the Object Nationalizer.

5   If you have not already done so, close the Edit Windows dialog box.

The next time you open the Edit Windows dialog box, the overlay you created appears with a selected check box.

Modifying Overlays Using a Text Editor

Because overlay files are text based files, if you have created the initial overlay file using Object Nationalizer, you can use any text based editor to modify your overlays.

To modify overlays:

1 Using a text editor, open your .txt overlay file.

A notice appears at the top of the .txt file informing you that you must not edit anything outside the curly brackets { }.

2 Make the changes.

3 Save the text file.

> **Caution:** Because you can render the .txt overlay file unusable, when modifying your overlay files in a text editor, do NOT edit anything outside of the curly brackets { }.

For more information regarding Unify Technologies products, refer to the Unify documentation.

Restoring a Customized Window

If you use Object Nationalizer to customize a VISUAL window, you can restore the window to its original layout. When you restore the window, the customizations you made are deleted permanently. Consider making a backup copy of the text overlay file before performing this procedure.

To restore a window to its original layout:

1 Select **Admin, Window Editor**.

2 Select the edited window.

3 Click **Revert Program to Original**. Your customizations are deleted and the window is restored to its original layout.

Chapter 6:   Translations

This chapter contains this information:

What Is Translation Maintenance?

Use Translation Maintenance to create translations or alternate text for strings in the VISUAL interface. For example, you can use Translation Maintenance to create a French translation of the interface. You can also use Translation Maintenance to customize the terms that are used in the interface. For example, you can replace all instances of Vendor ID with Supplier ID.

Use Translation Maintenance to complete these tasks:

- **Create and maintain language packs.** A language pack contains translations for text found in the VISUAL interface.
- **Import language packs.** You can import language packs from a comma-separated text file. You can create a translation from an existing language pack instead of creating one from scratch.
- **Export language packs.** You can export language packs to a comma-separated text file.
- **Delete language packs.** You can delete a language pack from your database if you no longer use it.
- **Assign language packs.** Assign language packs to other users.

Language packs are stored in the database.

You must be signed in as the SYSADM user or a user with system administrator privileges to access Translation Maintenance.

Translation Maintenance and WizTom Language Packs

If you use language packs created with WizTom™, the WizTom translations are used in place of translations that you create with Translation Maintenance.

Text String Files

Two text string files are available in the VISUAL strings zip file. One file contains all text strings in VISUAL. The other file contains the differences is text strings between the current version of VISUAL and the previous version of VISUAL. You can import these files to begin a translation.

See "Importing Translations" on page 6–8 in this guide.

What Can Be Translated with Translation Maintenance?

You can translate these text strings:

- Field labels
- Button labels
- Menus
- Window titles

- System messages
- Text in dialogs

Components that are not mentioned in the list above cannot be translated with Translation Maintenance.

Special Characters

Some text strings include characters that have a specific function. This table shows the characters, their functions, and recommended best practices:

Character	Function	Best practice
& (ampersand)	The keyboard control for the item. The letter after the ampersand is the keyboard control. The ampersand is replaced by an underscore in the interface.	You can retain the keyboard control in your translation. You can use a different letter for the keyboard control than the one used in the default VISUAL translation. **Note:** The ampersand is a standard Microsoft Windows function. For more information about the use of ampersands, see https://support.microsoft.com/en-us/help/261320/how-to-use-an-ampersand-in-a-form-name-menu-or-control.
%1, %2, %3, and so on	A token. A token is made up of the percent sign followed by a number.	If a text string includes a token, also include the token in your translation. The token is replaced by information in your database. You cannot add a token to a text string that does not already use one.
<<<	Line break in a table column header.	You can move or remove the line break. Users can change the location of the line break in the Configure Line Item Table dialog that is available on windows with the tables.

Security

The SYSADM user and users with system administrator privileges can access Translation Maintenance.

Creating Language Packs

To create a language pack, complete these steps:

1 Create the language pack ID.

2 Gather the text strings to be translated. Alternatively, you can import an existing language strings file to begin the translation. See "Importing Translations" on page 6–8 in this guide.

3 Specify translations for text strings.

4 Test the translations.

Creating Language Pack IDs

1 Select **Admin**, **Translation Maintenance**.

2 Select **File**, **Create Language Pack**.

3 Specify this information:

Language ID – Specify the ID to use for the language pack. We recommend using ISO language and locale codes, such as fr-CA for French Canadian.

Description – Specify a description of the language pack.

4 Click the **Save** button.

Gathering Text Strings for a Language Pack

The Gather Strings mode collects all unique text strings in a VISUAL window or dialog. If a text string is used more than once in a VISUAL window, or if it has already been gathered, the text string is not gathered again. For example, if you gathered text strings for the Part Maintenance window, and then gathered text strings for the Customer Order Entry window, Site ID and Part ID would be gathered only once.

If a window has dialogs that can be accessed from a menu, you must open these dialogs individually to gather the strings for translation. For example, in Part Maintenance you must open each dialog on the Maintain and Info menus to gather the strings for those dialogs.

These conditions apply to the Gather Strings mode:

• Work with one executable at a time. To collect strings from an executable, open the executable, its sub-windows, and dialogs. Close the executable to collect strings. If you open more than one executable at a time, only the text strings from the last executable that you close are gathered.

Note: VM.exe can be running when you gather strings from another executable. The text strings from VM.exe do not overwrite text strings from other executables, even if VM.exe is the last executable that you close. To gather strings from VM.exe, launch VM.exe, its dialogs, and its sub-windows. Then, close VM.exe.

- To ensure that translations are not overwritten, only one user at a time should use the Gather Strings mode.

- Text strings are gathered per language pack. Text strings that you gather for one language pack are not gathered for a second language pack.

1 Select **Admin**, **Translation Maintenance**.

2 Select **Edit**, **Assign Languages**.

3 Ensure that the ID of the language pack for which you are gathering strings is assigned to at least one user. If the translation is not ready to be deployed to user, we recommend that you assign the language pack to your user ID.

4 Click **Save**.

5 In the Language field, specify the language pack for which you are gathering strings. The **Active** check box is selected.

6 Select the **Gather Strings** check box.

7 Close the Translation Maintenance window. You must close the Translation Maintenance window

8 Open the VISUAL window that you want to translate. All unique text strings that are displayed in the interface are gathered. In addition, text strings for messages that are generated by the window or dialog are collected. Examples of messages include confirmation and warning messages. To collect text strings from dialogs and sub-windows, you must open each dialog or sub-window separately.

9 Close the window.

10 Select **Admin**, **Translation Maintenance**. The unique strings from the window or dialog that you opened are displayed in the table.

Specifying Translations for Text Strings

If you translate a term that is used in several areas of VISUAL, the translation is used in every place that the term is used. For example, if you specify a translation for the word Save, your translation is used in every window and dialog where the word Save is used. The translation is implemented in all windows and dialogs where the term is used, even if you have not yet gathered text strings from all of the windows and dialogs.

1 Select **Admin**, **Translation Maintenance**.

2 In the Language field, specify the language pack for which you are providing translations. Text strings that have been gathered for the language pack are displayed in the table. The default VISUAL text is displayed in the Visual column. Translations are displayed in the Foreign column.

3 Optionally, use these search filters to help you to locate the string that you want to translate:

- **Visual and Foreign fields**. Use the Visual and Foreign fields to locate strings that contain characters that you specify. For example, if you specify PART in the Visual field, all gathered VISUAL strings that include PART, such as Part ID and Department, are displayed. Wildcards are not supported in the filter fields.

- **Show Translated**. Select this check box to display strings that have been translated. When you select this check box, rows where the value in the Foreign column do not match the value in the Visual column are displayed.

- **Show Un-translated**. Select this check box to display strings that have not been translated. A string is considered untranslated when the value in the Visual column exactly matches the value in the Foreign column, or when the Foreign column is blank and the Visual column is populated.

4 In the Foreign column, specify the translation to use for each text string.

5 Click the **Save** button. Your translation is saved to the database.

Manually Adding Translation Strings

You can manually add a line to the Translation Maintenance table. If you know the VISUAL term that you want to translate, you can manually specify the term and the translation instead of gathering strings from the interface.

1 Select **Admin**, **Translation Maintenance**.

2 In the Language field, specify the language pack for which you are providing translations.

3 Click the **Insert Translation** button.

4 In the Visual column, specify the string that you want to translate. The string must match a string that is used in VISUAL.

5 In the Foreign column, specify the translation.

6 Click the **Save** button.

Testing the Translation

After you specify translations, verify that they are displayed correctly in the VISUAL interface.

1 Select **Admin**, **Translation Maintenance**.

2 Select **Edit**, **Assign Languages**.

3 In the row that contains your user ID, select the ID of the language pack that you are testing in the Language ID field.

4 Click **Save**.

5 In the Language field, specify the language pack that you are testing. The **Active** check box is selected.

6 Clear the **Gather Strings** check box.

7 Click the **Save** button.

8 Open a VISUAL window for which you provided translations.

9   Verify that your translations are displayed. To edit a translation:

    a   Close the VISUAL window that you are translating.

    b   In Translation Maintenance, ensure that the language pack you are creating is specified in the Language field and that the **Active** check box is selected.

    c   Edit the translation.

    d   Click the **Save** button.

    e   Re-open the VISUAL window that you are translating to verify the update.

Importing Translations

You can import translations from a text file. The text file must meet these criteria:

• The VISUAL string must be listed first, followed by the translation
• The VISUAL string must be separated from the translation by either a comma or a tab.
• Each text string must be enclosed in quotation marks
• Each translation pair must be on a separate line
• A header row must not be used

For example, your text file could contain these lines:

```
"Edit qty complete vs. standard","Modifier qté complétée v. standard"

"Edit receiver","édition des livraisons"
```

The first text string is the VISUAL string; the second string is the translation.

Before you can import a translation, you must first create a language pack. See "Creating Language Pack IDs" on page 6–4 of this guide.

1 Select **Admin**, **Translation Maintenance**.

2 Select **File**, **Import Translation File**.

3 In the Language field, specify the language pack to which you are importing the file.

4 Click the **Choose Translation File** button and select the file to import.

5 Select from these processing options:

Replace Existing Translations – When you select this check box, these actions occur:

• If a VISUAL text string exists in both the language pack and the file, the translation in the file overwrites the existing translation in the language pack.
• If a VISUAL text string exists in the import file but not the language pack, the string is imported, unless the string in the file has a null value for the translation. Strings with null translations are not imported.
• If the VISUAL text string exists in the language pack but not the import file, the translation in the language pack is retained.

Reject Untranslated Strings – Select this check box to ignore text strings that have null translations.

Delete Existing Translations Prior to Import – Select this check box to delete all translations from the language pack before importing the translations in the file.

If you do not select any check boxes, the strings in the text file are added to the strings in the language pack. If a VISUAL text string exists in both locations, the string is duplicated. We recommend that you select at least one processing option unless your language pack is blank.

If you are importing the Differences text file that contains only the strings that are new to the current version of VISUAL, then we recommend selecting the **Replace Existing Translations** option.

6 Click the **Run** button.

Exporting Language Packs

You can export language packs to a text file. You can use this option if you prefer to create translations outside of VISUAL. You can import the completed file later. You can also use this option if you create your translations in a test database. When the translation is ready, you can export the file from the test database and import it into the production database.

1   Select **Admin**, **Translation Maintenance**.

2   Select **File**, **Export Language Pack**.

3   In the Language field, specify the ID of the language pack to export.

4   In the Export File field, specify the file path and name of the file to create. To replace an existing file, click the Choose Export File button and select the file to replace.

5   Click **Run**.

Deleting Translations

You can delete individual translation strings or an entire language pack.

Deleting Translation Strings

You can delete a VISUAL string and its translation from a language pack:

1   Select **Admin**, **Translation Maintenance**.

2   In the Language field, specify the language pack.

3   Select the row to delete.

4   Click the **Delete Row** button.

5   Click **Save**.

Deleting a Language Pack

1   Select **Admin**, **Translation Maintenance**.

2   In the Language field, specify the language pack.

3   Click the **Delete Language Pack** button.

4   In the confirmation dialog, click **Yes**.

Assigning Languages to Users

The SYSADM user can assign languages to all other users in the database. A user with system administrator privileges can assign languages to all other users except the SYSADM user.

Individual users can also select the language that they want to use. See "Choosing a Language" on page 4–2 in the Concepts and Common Features guide.

1   Open the Assign Languages dialog using one of these methods:

   • Select **Admin**, **Translation Maintenance**. Then, select **Edit**, **Assign Languages**.

   • Select **Admin**, **Language Assignment**.

2   For each user, select the language to use in the Language ID column. To use the default English translation, leave the Language ID column blank.

3   Click **Save**.

Removing Language Associations

To restore the interface to the default English translation for users:

1   Open the Assign Languages dialog using one of these methods:

   • Select **Admin**, **Translation Maintenance**. Then, select **Edit**, **Assign Languages**.

   • Select **Admin**, **Language Assignment**.

2   In the Language ID column, delete the language ID for each user for whom you are restoring the default translation.

3   Click **Save**.

Chapter 7: Audit Maintenance

This chapter includes this information:

What is Audit Maintenance?

For publicly traded companies, United States federal law requires companies to comply with the Sarbanes-Oxley Act (SOX) as of July 30, 2002. SOX establishes new or enhanced operating standards for U.S. companies. While the federal government requires this compliance of public company boards, management, and public accounting firms, it does not apply to private companies. Use Audit Maintenance to help your company comply with SOX standards.

Audit Maintenance does not ensure SOX compliance on its own, however. You must implement the appropriate business practices to achieve compliance.

You can use Audit Maintenance to track any field in the database except for binary fields. However, Infor does not recommend that you track every field, as this places a strain on your database.

Only the SYSADM users can access Audit Maintenance.

Accessing Audit Management

When you access Audit Maintenance, you can set up tables for yourself or specific users, and output reports to reflect the information that you track.

Only the SYSADM user can access Audit Maintenance. Select **Admin**, **Audit Maintenance**.

Before any audit results are shown in the tables, you must specify the information to track.

Configuring Audit Files

To specify information to track:

1   Click the **Configure Auditing** toolbar button.

    Note: To build the list of tables that can be tracked, all database tables are read. This process may take a few minutes.

    The left side of the Audit Configuration window lists all tables in the database.

    For any database table that has unsaved configuration(s), the table's icon on the left pane is red.

2   To add a table to the Audit Configuration table, click the table name in the left pane.

    The table name and column names are shown in the Audit Configuration table. If a column is a primary key, the Primary Key check box is selected. The type of data and length of the column is shown in the Data Type field.

3   To track a column, select the **Tracked** check box. To track all columns, click the **Select All Columns** button.

4   Specify the actions to track. Select one or more of these check boxes:

    Insert – Select this check box to track when users add data in this column. Clear the **Insert** check box if you do not want to track when users add data in this column.

    Update – Select this check box to track when users edit data in this column. Clear the Update check box if you do not want to track user edits.

    Delete – Select this check box to track when users delete data in this column. Clear the **Delete** check box if you do not want to track user deletions.

    Note: When you select the *Tracked* check box, the Insert, Update, and Delete check boxes are selected by default.

5   To save the configuration for the current table, click the **Save [table_name]** button. The name of the table is shown in the tool tip for the Save button. To save the configuration for all tables, click the **Save All Tables** button. Your configurations are written to the HISTORY_DEFINITION table.

6   To complete the configuration, write the database triggers. To write the triggers for the current table only, click the **Write Triggers for [table_name]** button. The name of the table is shown in the tool tip for the Write Triggers button. To write the triggers for all tables, click the **Write All Triggers** button.

Auditing Report Times

To track the duration of reports, select the **Audit Report Times** check box. The start time and end time of any report run is recorded. If you select this check box, all reports are tracked. You cannot choose which reports to track.

Working with the Audit Configuration Toolbar

This table shows the buttons in the Audit Configuration toolbar and their functions:

Button	Label	Description
	Save	Click this button to save changes to your Audit Configuration for the current table only. When you click this button, the current table's red icon in the list pane turns blue.
	Save All	Click this button to save changes to all the database tables that you have configured for Audit tracking. When you click this button, all red database table icons in the list pane turn blue.
	Exit	Click this button to exit the Audit Configuration window and return to Audit Maintenance.
	Quick Filter	Click this button to enable the Quick Filter functionality for the Audit Configuration window.
	Clear Filter	To remove an applied filter, click this button.
	Write Trigger	Click this button to write all the triggers for the current database table. Remember that this applies only to the current table.
	Write Triggers	To write all the triggers for all selected tables, click this toolbar button. This affects all selected Tracked database columns, regardless of the database table.
	Select All	To enable tracking for all rows on the Audit Configuration table, click this toolbar button. To track most of the table's information, it may be easier for you to select all, then clear the rows you do not want to track. When you select this function, the Insert, Update, and Delete options for all database table columns are also selected.
	Unselect All	To remove tracking from all rows on the Audit Configuration table, click **Unselect All**.
	Restore Selections	To return to the most recent tracking selections, click this toolbar button. Keep in mind that this only reverts to the settings from the most recent Save.

Viewing Audit Results

After you specify the database columns to track and users make changes to configured columns, the Audit Maintenance window shows the changes users have made. By default, changes made in the last 14 days are shown.

The Audits Maintenance window shows this information:

Users table – The Users table shows the IDs of the users who have made changes to the tracked tables.

Tables table – The Tables table shows the names of the tables where changes were made. For reports, the file name of the reports users ran is shown. The Audits columns shows the number of tracked changes made to the table.

Results table – The Results table shows this information:

> **Create Date** – The date the column was changed is shown.

> **Column** – The name of the changed column is shown. For reports, the file name of the report is shown.

> **Data Type** – The column's data type is shown. The types are String (text), Number, or Date.

> **Action** – For database columns, the type of action performed on the column is shown. The types are Update, Insert, or Delete. For reports, Audit is inserted.

> **Primary Key** – The primary key for the record displayed in the row is shown.

> **Old Value** – For database columns, the value of the table column prior to the change is shown. If the row refers to a report and you have selected the Audit Report Times and Report Audit check boxes, the start time of the report is shown.

> **New Value** – For database columns, the change made to the column is shown. If the row refers to a report and you have selected the Audit Report Times and Report Audit check boxes, the system inserts the end time of the report.

Filtering Audit Results

When you open the Audit Maintenance window, changes made to tracked tables in the last 14 days are shown by default. Use the filters to view a different set of results. You can filter by date, user, table, column, and primary key. You can also filter by action type or choose whether to view information about reports.

To set filters:

User – To view results for a single user, click the user in the Users table. The name of the user is shown in the User field in the Filter section. The results displayed are limited to only the selected user. To clear the User value and view results for all users, click the **Reset** button to the right of the field.

Table – To view results for a single table, click the table in Tables table. The name of the table is shown in the Table field in the Filter section. The results displayed are limited to only the selected table. To clear the Table value and view results for all tables, click the **Reset** button to the right of the field.

Column – To view results for a single Column, click the column in the Results table. The name of the column is shown in the Column field in the Filter section. To clear the Column value and view results for all columns, click the **Reset** button to the right of the field.

Primary Key – To view results related to a particular primary key. click the primary key in the Results table. The name of the primary key is shown in the Primary Key field in the Filter section. To clear the primary key value and view results for all primary keys, click the **Reset** button to the right of the field.

Date/Time Range – Use the Start, End, and Horizon fields to filter the audit results by date and time. You can specify a date range by specifying Start and End dates, by using the Start date with the Horizon, by using the End date with the Horizon, or by using the Horizon only.

When you select a date in the Start or End fields, 12:00:00 AM is inserted as the time. You can change the time as needed.

Start – To view information for a specific date range, such as the past week or last two months, specify the first date in the range in this field. Click the **Calendar** button and select a date. Change the start time if necessary.

To complete the date range, either specify an end date and time or a horizon. If you specify a horizon, the horizon value is added to the start date to determine the date range. For example, if you specified a start date of January 10, 2012 and a horizon of 14 days, changes made between January 10, 2012 and January 24, 2012, inclusive, are shown in the results table.

End – Use the End field to specify the last date in a specific date range. Click the **Calendar** button and select a date. Change the end time if necessary.

If you specified a date in the Start field, changes made between the start date and end date, inclusive, are shown in the table. If you specified a horizon, the horizon value is subtracted from the end date to determine the date range. For example, if you specified an end date of January 15, 2012 and a horizon of 14 days, changes made between January 1, 2012 and January 15, 2012, inclusive, are shown in the results table.

Horizon – If you do not specify a date in the Start and End fields, the value you specify in the Horizon field is subtracted from the current date to determine the date range.

Use Dates from Table – To replace the Start and End fields with the date of the earliest record and date of the latest record in the table, select this check box and then click the Refresh button.

Insert – To view records added to tables, select this check box.

Update – To view changes made to existing records, select this check box.

Delete – To view records removed from the database, select this check box.

Report Audit – To view the reports user output, select this check box. If you have also selected the Audit Report Times check box, the reports run on the database, the time the reporting process began, and the time the reporting process stopped are shown.

Outputting Audit Maintenance Reports

You can output two reports from the Audit Maintenance window: the Audit History report and the Report Time Auditing report.

The Audit History report displays the information in the Audit Maintenance window at the time you ran the report. The information is grouped by the transaction that triggered the audit save.

The Report Time Auditing report lists the report duration information currently displayed in the Audit Maintenance window. The information is grouped by report.

Setting Reporting Options

Use the Reporting Options section to specify the output format for the audit reports. Specify this information:

Output Format – Click the drop-down button and select one of these options:

   Print – Use the Print option to send your reports to a printer.

   View – Use the View option to send your report to a report view application so you can see the report on screen.

   File – Use the File option to send the report to a text file and save it to your computer.

   E-Mail – Select this option to send the report in a Rich Text Format through Microsoft Outlook. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

Other Output Formats

In addition to the Reporting Options for output, Audit Maintenance provides spreadsheet and XML versions of the result set.

Select **File, Send to Excel** to export the audit results to a Microsoft Excel spreadsheet. Select **File, Send to XML** to export the audit results to an XML file.

Viewing Audit History for a Record

You can use the Audit History dialog to view audit results for a single record. The Audit History dialog is available on the Info menu in certain windows, such as Customer Maintenance and Customer Order Entry.

To view audit results for a single record, you must audit at least one column in a table related to the record. For example, to display information in the Audit History dialog in Customer Maintenance, you must audit at least one column in a table related to customer IDs, such as CUSTOMER, CUSTOMER_BANK, or CUSTOMER_SITE. This table shows where the Audit History dialog is available and the database tables that can be included in the audit history:

Window	Tracked Tables
Accounting Window	ACCOUNT ACCOUNT_AT_NATIVE ACCOUNT_BAL_DIM ACCOUNT_BAL_SUM ACCOUNT_BALANCE ACCOUNT_BUDGET ACCOUNT_BUDGET_SUM ACCOUNT_GROUP ACCOUNT_PERIOD ACCOUNT_PROFILE ACCOUNT_SITE
Contact Maintenance	CONTACT
Customer Order Entry	CUSTOMER_ORDER CUST_ORDER_LINE CUST_ORDER_SHARE CUST_ORDER_TYPE CUST_LINE_BILLING CUST_LINE_DEL CUST_LINE_TRC_CTL CUST_PRICE_EFFECT CUST_PRICE_GROUP CUST_PRIORITY
Customer Maintenance	CUSTOMER CUSTOMER_BANK CUSTOMER_CONTACT CUSTOMER_ENTITY CUSTOMER_GROUP_RELATION CUSTOMER_SITE

Window	Tracked Tables
Estimating	QUOTE QUOTE_LINE QUOTE_LINE_BILLING QUOTE_ORDER QUOTE_ORDER_LINE QUOTE_PRICE QUOTED_OPTIONS
Manufacturing Window	WORK_ORDER REQUIREMENT REQUIREMENT_COST REQUIREMENT_SUM OPERATION OPERATION_AUDIT OPERATION_RESOURCE OPERATION_SUMMARY OPERATION_TYPE
Outside Service Maintenance	SERVICE SERVICE_CHARGE_ SERVICE_DISP_LINE SERVICE_DISPATCH SERVICE_DISPATCHED SERVICE_RECVR_DISP SERVICE_RECEIPT SERVICE_SHIPPING SERVICE_SITE SERVICE_UNIT_CONV

Window	Tracked Tables
Part Maintenance	PART PART_ALIAS PART_ALIAS_TYPE PART_ALTERNATE PART_CROSS_SELLING PART_LOCATION PART-PRICE_GROUP PART_REPLENISHMENT PART_SHIPPING PART_SITE PART_SUBSTITUTE PART_TRACE_LOCATION PART_UNITS_CONV PARRT_WAREHOUSE PART_WHS_REPLENSIH
Project Maintenance	PROJ_SUMM_BURD_AMT PROJECT_BASELINE PROJECT_BATCH_LINK PROJECT_BUDGET PROJECT_CEILING PROJECT_EAC_POC PROJECT_ETC PROJECT_GL_TRANS PROJECT_INFO PROJECT_STATUS PROJECT_SUMMARY PROJECT_TYPE
Purchase Order Entry	PURC_LINE_DEL PURC_LINE_TRC_CTL PURC_ORDER_LINE PURC_ORDER_REQ PURC_ORDER_RFQ PURCHASE_CONTRACT PURCHASE_ORDER

Window	Tracked Tables
Purchase Management Window	PURC_LINE_DEL PURC_LINE_TRC_CTL PURC_ORDER_LINE PURC_ORDER_REQ PURC_ORDER_RFQ PURCHASE_CONTRACT PURCHASE_ORDER
Requisitions	PURC_REQ_LINE PURC_REQ_LINE_DEL PURC_REQUISITION PURC_RFQ_REQ
RFQ Entry	REQUEST_FOR_QUOTE RFQ_LINE RFQ_VENDOR RFQ_VENDOR_QUOTE
RMA Entry	RMA RMA_LINE
Order Management Window	CUSTOMER_ORDER CUST_ORDER_LINE CUST_ORDER_SHARE CUST_ORDER_TYPE CUST_LINE_BILLING CUST_LINE_DEL CUST_LINE_TRC_CTL CUST_PRICE_EFFECT CUST_PRICE_GROUP CUST_PRIORITY
Shop Resource Maintenance	SHOP_GROUP SHOP_RESOURCE SHOP_RESOURCE_SITE SHOP_VIEW

Window	Tracked Tables
Vendor Maintenance	VEND_BANK_ACCOUNT
	VEND_CONTACT
	VEND_GROUP_RELATION
	VENDOR
	VENDOR_ADDRESS
	VENDOR_BANK
	VENDOR_BUYER
	VENDOR_CALENDAR
	VENDOR_CONTACT
	VENDOR_ENTITY
	VENDOR_GROUP
	VENDOR_PART
	VENDOR_QUOTE
	VENDOR_REMIT_ADDR
	VENDOR_SERV_QUOTE
	VENDOR_SERVICE
	VENDOR_WEEK
Warehouse Maintenance	WAREHOUSE
	WAREHOUSE_ADDRESS
	WAREHOUSE_WIP_VAS

Chapter 8: VISUAL AutoRun Services

Use VISUAL AutoRun services to run certain VISUAL processes on the days and times you specify. This chapter provides an overview of the available services, how to install them, and how to schedule them.

This chapter contains these topics:

VISUAL AutoRun Services

You can use services to schedule certain long-running processes at convenient times. After you install the services, use the appropriate dialog to schedule the service.

Each service runs a process associated with a particular window. After the services are installed, schedules are set up in the window where the processes would ordinarily be run. For example, the Costing Service runs costing in the Costing Utilities window, and you set up the schedule to run the Costing Service in a dialog available in the Costing Utilities window.

This chapter provides an overview of services. For detailed information about each service, see these guides:

- For information about installing and scheduling VRDTASVC, see "Reporting Database Tables" on page 2–14 in this guide.
- For information about installing and scheduling VMSCHSVC, see "Running the Concurrent Scheduler with the Scheduling Service" on page 6-31 in the Manufacturing guide.
- For information about installing and scheduling VMDBRSVC, see "Running the Concurrent Scheduler with the Scheduling Service" on page 6-31 in the Manufacturing guide.
- For information about installing and scheduling VRPTSVC, see "Printing Work Order Travellers with the Reporting Service" on page 8-12 in the Manufacturing guide.
- For information about installing and scheduling VMCSTSVC, see "Running Costing with the Costing Service" on page 5-42 in the System-wide guide.
- For information about installing and scheduling VMMRPSVC, see "Running Material Requirements Planning with the MRP Service" on page 10-41 in the Inventory guide.

Installing a VISUAL AutoRun Service

Before you install a service, make sure you meet the prerequisites. Then, use the general procedure described in this section to install services.

This table shows the services you can install to run VISUAL processes:

Service EXE	What does this service do?	How many times can I install this service?
VRDTASVC.EXE	Loads data into the Reporting database tables	Once per database
VMSCHSVC.EXE	Runs a schedule	Once per site
VMDBRSVC.EXE	Runs a schedule in a DBR-enabled database	Once per site
VRPTSVC.EXE	Prints Work Order Travellers	Once per database
VMCSTSVC.EXE	Runs costing	Once per site
VMMRPSVC.EXE	Runs MRP	Once per site

For information about the services used with BODs, see "Integrations" on page 9–1 of this guide.

Prerequisites

The computer where you install a service must have these components installed:

• **VSRVANY.EXE** – VSRVANY.EXE is a VISUAL tool that allows the service executables to be run as a service. VSRVANY.EXE must be installed in the same directory as the service executables. VSRVANY.EXE is installed with the VISUAL installer.

• **SC.EXE** – SC.EXE is a Microsoft Windows tool used to make modifications to services and to remove services. SC.EXE is commonly installed with Microsoft Windows. Run a Microsoft Windows search to verify that SC.EXE is installed. SC.EXE does not have to be in the same directory as the services executables; you can leave SC.EXE in the directory where Microsoft installed it.

• **Gupta Runtimes** – You must also have the Gupta runtimes for your version of VISUAL installed on the computer where you run the service.

Installing a Service

To install a service:

1   In your VISUAL executables directory, locate the service executable.

2   Right-click the executable and select **Run as Administrator**. The Sign In dialog is displayed.

3 Specify this information:

User ID – Specify the user ID that the service uses to sign into the VISUAL database. This can be any valid VISUAL user ID. The user ID you select should have access to the VISUAL window where the process is run. For example, if you are installing VMCSTSVC, make sure the user you specify has access to the Costing Utilities window.

Password – Specify the password associated with the user ID.

Database – Specify the database on which to run the service.

4 Click **Sign In**. The name and description of the service is displayed.

5 Specify this information:

Site ID – If a service is run by site, specify the ID of the site. This field is not displayed if the service is not run by site.

Log File Directory – Specify where to store the log file for the service.

Polling Interval – Specify how frequently the service should check for updates. The maximum value is 900 seconds.

Log Level – Specify the level of information to write to the log file. Click one of these options:

None – To write the time the service started, click this option. This option is recommended for normal production environments.

Error – To write the time the service started and any error messages, click this option.

Info – To write to the time the service started, error messages, and additional information about the service, click this option. The use of this option is recommended only if you are troubleshooting issues with the service. When you use this option, the size of the log file grows quickly.

The log file's name is the executable name of the service combined with the name of your site, when applicable. For example, if you installed the scheduling service for site MMC, the log file's name is VMSCHSVC_MMC.log. The size of the log file is limited to 1 MB. When the log file approaches 1 MB, the log is renamed by appending the current date and time, and a new log file is created.

6 Click **Install Service**.

Installing Services in a Single Sign-on Environment

If you use single sign-on, you must install the services from a command line prompt with the System Administrator parameter:

1 Select **Start**, **All Programs**, **Accessories**.

2 Right-click Command Prompt and select **Run as administrator**.

3 In the Command Prompt line, specify <Service path>/<service.EXE> -SYSADM.

Replace <Service path> with the path where the service executable is installed and <service.EXE> with the executable name of the service.

4   Proceed with steps 3 through 6.

Uninstalling a Service

To uninstall an instance of a service for a site:

1   In your VISUAL executables directory, locate the executable for the service.

2   Right-click the executable and select **Run as Administrator**. The Sign In dialog is displayed.

3   Specify this information:

User ID – Specify the user ID that the service uses to sign into the VISUAL database. This can be any valid VISUAL user ID.

Password – Specify the password associated with the user ID.

Database – Specify the database on which to run the service.

4   Click **Sign In**.

5   If the service is installed by site, in the Site ID field specify the ID of the site where you no longer want to run the service.

6   Click **Remove Service**.

Scheduling the Service

After the service is installed, schedule the times when the service is run. This table shows where to schedule the services, who can schedule the service, and how often the services can be run.

Service EXE	Where do I schedule this service?	Who can schedule this service?	How many times per day can I run this service?
VRDTASVC	Application Global Maintenance. Select **Maintain**, **Visual Reporting Data.**	SYSADM user only	Six. You can also set up this service to continually check for updates based on the polling interval.
VMSCHSVC.EXE	Concurrent Scheduler. Select **File**, **Set as Scheduled.**	Any user can schedule the service. You can create a schedule for one of the site's schedule IDs. If you attempt to create a schedule for a second schedule ID in a site, a message is displayed states that you are changing the schedule that is run with the Scheduling Service.	Six times per schedule.
VMDBRSVC	Drum-Buffer-Rope Scheduler. Select **File**, **Set as Scheduled.**	Any user can schedule the service. One service schedule can be created for each of the site's schedules.	Six times per schedule.
VRPTSVC	Work Order Traveller Window. Select **File**, **Save as Scheduled**.	Any user. Each user can create one schedule per site. Multiple schedules can be created for a site.	Six times per user schedule.
VMCSTSVC	Costing Utilities. Select **File**, **Costing Service Schedule.**	Any user can schedule costing, but only one schedule can be created per site.	Six for inventory transaction costing, and six for journal preparation. You can set up a different schedule for inventory transactions and journal preparation.

Service EXE	Where do I schedule this service?	Who can schedule this service?	How many times per day can I run this service?
VMMRPSVC	Material Planning Window Select **File**, **Set Material Requirements Planning Service Schedule.**	Any user can schedule MRP, but only one schedule can be created per site.	Six times per schedule.

To schedule a service:

1   Access the schedule dialog box from the appropriate window.

2   Specify the parameters to use when you run the service. Generally, the options you can select when you set up the service schedule are the same options you can select when you run a process manually

3   Use the Service Schedule section to specify when the service is active. Specify this information:

   Start Date – Specify the date that the service should start checking for updates. Leave this field blank or specify today's date if you do not want to delay the start of the service.

   End Date – Specify the last date that the service should check for updates. Leave this field blank if you do not want to set up an expiration date for the service.

   Enabled – To use the service, select this check box. To stop using the service, clear this check box.

4   In the Run Type section, the types of available service runs are displayed. For all services except VRDTASVC, Weekly is the only option. When Weekly is selected, you can specify on which days of the week the service is run. In addition to the Weekly option, the VRDTASVC also has an Immediate option. If you select this option, then the service continually checks the database to see if updates are required.

5   In the Days of Week section, specify the days of the week to run the service.

6   In the Run At section, specify the times of day that the service should check for updates. The times you specify apply to all days that you run the service. You can run services up to 6 times a day. If you do no specify any Run At times, then the service is run at midnight on the days you specify.

   Note: The service may not run exactly at the time you specify. The service is prompted to check for updates at the time you specify, but the polling interval specified for the service may pass before the data is written to the reporting tables.

7   Click **Save**.

Monitoring Services

On the schedule dialog for the services, you can view when the service was last run. You can also review the log file for the services.

Coordinating MRP and Scheduling Service Schedules

Since material requirements planning and scheduling can be dependent upon each other, you can set up the schedules for these services to ensure that each runs only when the other is not running. When you set up the MRP service schedule, select the Delay for Scheduling check box to ensure that MRP is not run while scheduling is being run. When you set up the Scheduling service schedule, select the Delay for MRP check box to ensure that Scheduling is not run while MRP is being run.

If you want to run the MRP service and Scheduling service in a particular order, you should consider the polling interval that you use for the services when you specify start times. When you set up a schedule for a service, the service may not start exactly at the run time you specify because of the polling interval. For example, if you specified that a service should start at 7:00:00 a.m. and your polling interval is 600 seconds, the service could start as late as 7:09:59. To run services in a particular order, the start time of the second service should be greater than the start time of the first service plus the largest polling interval used on the services. For example, if you set up services with these parameters, then the MRP service is run before the Scheduling service:

Service	Settings
MRP Service	**Polling Interval** – 300 seconds **Run At time** – 7:00:00 a.m. **Delay for Scheduling check box** – selected
Scheduling Service	**Polling Interval** – 600 seconds **Run At time** – 7:11:00 a.m. **Delay for MRP check box** – selected

To make the start of the Scheduling service more predictable, you can adjust the start time of the Scheduling service to account for the typical duration of the MRP run. For example, if MRP typically takes an hour to run, you could set the Scheduling service to start an 75 minutes after the MRP service. Since the MRP service would be complete before the scheduled start of the Scheduling service, the Scheduling service would more likely start close to the start time you specified.

Deactivating a Service Schedule

To deactivate a service schedule:

1   Access the schedule dialog for the service.

2   Clear the **Enabled** check box.

3   Click **Save**.

Chapter 9: Integrations

Use the features described in this chapter to integrate VISUAL to other products. The information in this chapter describes the actions you take in VISUAL. Refer to the appropriate integration guide for complete information on integrating VISUAL with other products.

This chapter includes this information:

Mapping BOD Codes

BODs employ standard codes, such as ISO codes, for elements such as currency, language, country, and unit of measure. To ensure that information flows properly from VISUAL, use Code Mapping Maintenance to associate the codes you use in VISUAL to the BOD codes.

You can map codes on a one-to-one basis only. For example, if you use multiple codes for US, such as USA, US of A, and so on, you can only map one of these codes in Code Mapping Maintenance. An unmapped code is not sent.

When VISUAL sends information to a BOD, the user-defined codes in VISUAL are replaced with the codes you mapped to them in Code Mapping Maintenance. When information is sent into VISUAL via a BOD, the BOD codes are replaced with their corresponding VISUAL user-defined codes.

Note: Infor recommends restricting access to Code Mapping Maintenance to ensure that data passes to and from BODs as expected. You can control access to Code Mapping Maintenance in Program Security.

To map codes:

1   Select **Admin**, **Code Mapping Maintenance**.

2   Click the **List ID** drop-down button and select the code category to map.

3   Click the **Agency ID** drop-down and select an agency from the list. The Agency is the group responsible for devising a standard set of codes.

4   Click the **Insert Row** button.

5   Double-click the **VISUAL Code** column heading and select the code to assign to a SOA code.

6   Double-click the **SOA Code** column heading and select the code to map to the VISUAL code.

7   Click **Save**.

Replacing Free-form Country Codes with ISO Codes

If you use free-form country codes in addresses, you can use the Change Country utility to search for free-form country codes and replace them with two-letter ISO codes. The two-letter format is required in BODs.

To use the utility, you specify a free-form country code in the Country field and then press tab. If the code is found, a row is displayed in the results table. You can specify the first few letters of a free-form code and use wildcards in your search. Use the % character to indicate zero or more of any character replaces the % in your search. Use the _ (underscore) character to indicate that one character replaces the underscore in your search.

When you replace a free-form code, all instances of the code are replaced. You cannot replace the free-form code on certain documents and leave it intact on others.

The Change Country utility is not available in the VISUAL menu structure. It must be opened directly from the VISUAL executables directory. Only the SYSADM user can access the utility.

1   In the VISUAL executables directory, double-click VMCHGCNT.EXE.

2   Sign in as the SYSADM user.

3   In the Country field, specify the free-form country ID that you want to replace. You can specify a partial ID, or use the % and _ (underscore) wildcards.

4   Press **Tab**. Free-form country IDs that match your search term are displayed in the table.

5   In the New Country ID/ Country column, specify the ISO code to use in place of the free-form code.

   Note: The drop-down list shows the country codes that are available in the Country table. By default, two-letter ISO codes are in the table. Users can add their own codes to this table. Ensure that you select a two-letter ISO code.

6   Click **Save**. The free-form code is replaced with the new code that you selected.

Tables Updated by the Change Country Utility

This table shows the database tables and columns that are updated by the utility:

Table name	Column name
ACCOUNTING_ENTITY	ENTITY_COUNTRY ENTITY_COUNTRY_ID
APPLICATION_GLOBAL	COMPANY_COUNTRY COMPANY_COUNTRY_ID
BANK_ACCOUNT	BANK_COUNTRY BANK_COUNTRY_ID
BOL	SHIPTO_COUNTRY SHIPTO_COUNTRY_ID
CASH_DISBURSEMENT	COUNTRY CASH_DISBURSE_COUNTRY_ID
CARRIER	COUNTRY CARRIER_COUNTRY_ID
CONTACT	COUNTRY CONTACT_COUNTRY_ID
CUSTOMER	COUNTRY CUSTOMER_COUNTRY_ID BILL_TO_COUNTRY BILL_TO_COUNTRY_ID
CUST_ADDRESS	COUNTRY CUST_ADDR_COUNTRY_ID

Table name	Column name
CUSTOMER_BANK	COUNTRY COUNTRY_ID
CUSTOMER_GROUP	BILL_TO_COUNTRY BILL_TO_COUNTRY_ID
EMPLOYEE	COUNTRY EMPLOYEE_COUNTRY_ID
QUOTE	COUNTRY QUOTE_COUNTRY_ID
RFQ_VENDOR	COUNTRY RFQ_VENDOR_COUNTRY_ID
SHIPTO_ADDRESS	COUNTRY SHIPTO_ADDR_COUNTRY_ID
SITE	SITE_COUNTRY SITE_COUNTRY_ID
VENDOR	COUNTRY VENDOR_COUNTRY_ID REMIT_TO_COUNTRY REMIT_TO_COUNTRY_ID
VENDOR_ADDRESS	COUNTRY VENDOR_ADDR_COUNTRY_ID
VENDOR_BANK	COUNTRY VENDOR_BANK_COUNTRY_ID
VEND_BANK_ACCOUNT	BANK_COUNTRY BANK_COUNTRY_ID
VENDOR_GROUP	REMIT_TO_COUNTRY REMIT_TO_COUNTRY_ID
VENDOR_REMIT_ADDR	COUNTRY VENDOR_REMIT_COUNTRY_ID
WAREHOUSE	COUNTRY WAREHOUSE_COUNTRY_ID
WAREHOUSE_ADDRESS	COUNTRY WAREHOUSE_ADDR_COUNTRY_ID

Exporting Data from the Change Country Results Table

You can export the date in the Change Country search results table to Microsoft Excel. After you execute your search, select **File**, **Send to Microsoft Excel**.

Drill Back Maintenance

This window is reserved for future use.

Maintaining BOD Information

Use BOD Maintenance to set the default information that must be included in each Business Object Document (BOD).

This procedure describes the BOD settings in generic terms. For information on the specific settings required for each BOD, refer to the appropriate integration guide.

Note: You must be logged in as the SYSADM user to access BOD Maintenance.

1   Select **Admin**, **Application Global Maintenance**.

2   Select **Maintain**, **BOD Maintenance**.

3   Specify this information:

VISUAL Instance ID – Enter the value you specified as the third part of the logical ID when you configured Infor10 ION. For example, if the logical ID you used during Infor10 ION configuration is infor.visual.vmfg654, then specify vmfg654 in this field.

Tenant ID – Contact your Infor representative for this information. Every application in the integration must have the same tenant ID.

BOD Location – Specify a specific, physical site location. For example, if your company is located in New York, you could enter NewYork for this value. When BODs are generated, the value you enter for the location attribute helps to identify the information.

Calendar Name – Specify the name of your accounting calendar. Calendar Name is used in BODs such as AccountingChart.

Language ID – Specify the ID for the language you use. The format for the language ID is the ISO two character code for the language in lower case followed by a dash, then the ISO two character code for the country in upper case. For example, the code for US English is en-US.

Version – Click the drop-down button to select the version of the technology stack to which you are integrating.

Default UM – Specify the default unit of measure to use if an incoming IQM ItemMaster BOD does not have a stock unit of measure. VISUAL cannot consume an ItemMaster BOD sent by IQM if it does not have a stock unit of measure.

4   The Noun Settings table lists each application that can currently export BOD information and the ID of the BOD that sends the information. Specify this information for each Name:

Granularity – Granularity identifies the level that data is sent in the BOD. There are three levels of granularity: tenant, accounting entity, and location. Tenant is the broadest category; BODs are sent with the tenant identifier only. BODs with the accounting entity granularity setting are sent with both the tenant identifier and the accounting entity identifier. BODs with the location granularity setting are sent with the tenant identifier, the accounting entity identifier, and the location identifier. Most of these settings are default values that you cannot change.

SOR – Select the SOR check box if VISUAL is the system of record for the BOD ID. Clear the check box if VISUAL is not the SOR for the BOD ID. The SOR owns a particular set of data and publishes it to other components.

Sync – You can only send a Sync BOD if VISUAL is the SOR for the BOD. If VISUAL is the SOR, click the Sync drop-down button and select Out to publish the BOD. Select Disabled if VISUAL is the SOR but you do not want to publish the BOD.

Process – If VISUAL is the SOR, click the **Process** drop-down button and select In if you would like VISUAL to receive BODs from other components. If VISUAL is not the SOR, click the drop-down button and select Out to generate a Process BOD. If you do not want VISUAL to send the BOD, click the drop-down button and select Disable.

Type – This field is read-only. This field indicates whether the data sent is Transactional (such as a purchase order or customer order) or Master Data (such as customer IDs or account IDs).

Use Service – This check box is read-only. If the system selects the check box, then the BOD generation service is installed. If the system clears the check box, then the BOD generation is not in use. Although using the BOD generation service is optional, it can improve your system's performance.

Filter – If the **Allow Filter** check box is selected, you can filter the information you send in a BOD. Depending on the noun, you can filter information by ID or Date. Click the Filter button and enter a starting value and an ending value. Records created or modified between the two dates you specify, or between the two IDs you specify, are sent.

5   Click **Save**.

After you generate BODs, the Visual Instance ID, Tenant ID, BOD Location, and Calendar Name fields are unavailable. You cannot edit the information in these fields after BODs are generated.

Installing the Infor VISUAL BOD Generation Service

Note: Installing this service is optional.

The generation of certain BODs is resource-intensive and can cause certain windows, such as the Manufacturing Window, to run slowly. To improve performance, install the VISUAL BOD Generation Service (VBODGENSVC). You can use the VISUAL BOD Generation Service to generate these BODs:

- Calendar
- InventoryCount
- LaborTicket
- ProductionOrder
- ReceivableInvoice
- SalesOrder

If you install the service, all of these BODs are generated by the service. You cannot select which BODs to generate with the service.

You can install the service on any computer that has these components installed:

- **VSRVANY.EXE** – VSRVANY.EXE is a VISUAL tool that allows the VISUAL BOD Generation executable (VBODGENSVC.EXE) to be run as a service. VSRVANY.EXE must be installed in the same directory as VBODGENSVC.EXE.

- **SC.EXE** – SC.EXE is a Microsoft Windows tool used to make modifications to services and to remove services. SC.EXE is commonly installed with Microsoft Windows. Run a Microsoft Windows search to verify that SC.EXE is installed. SC.EXE does not have to be in the same directory as VBODGENSVC.EXE; you can leave SC.EXE in the directory where Microsoft installed it.

- **Gupta Runtimes** – You must also have the Gupta runtimes for your version of VISUAL installed on the computer where you run the service.

You can install the service only once for each database. If you attempt to install the service on a database that is already running the service, you will not be allowed to install the service again.

As part of the service install process, the system runs the Fix Synonyms and Grants function. As a result, you should install the service only when no other users are connected to the VISUAL database.

To install the service:

1   Right-click VBODGENSVC.EXE and select **Run as Administrator**. This file is located in the same directory as your other VISUAL executables.

2   Log into the database for which you want to run the service using any valid VISUAL user ID and password. This is the user ID the service will use when accessing the database. The user ID you specify can still be used to access the VISUAL executables. The service does not need its own user ID.

3   The Infor VISUAL BOD Generator Service contains the following fields:

   Service Name – The service appends the name of your database in parentheses to Infor Visual BOD Generation. For example, if your database is named PRODUCTION, the service would be named Infor Visual BOD Generation (PRODUCTION). This field is read-only.

   Service Description – The system inserts the description that it will display in the Microsoft Windows Services dialog box. This field is read-only.

   Log File Directory – Specify the directory where the log file will be stored. By default, the directory where VBODGENSVC.EXE resides is used. You can specify any directory.

   Polling Interval – Specify how often the service should check to see if BODs need to be generated.

   Log Level – Specify the content for the log files. Choose from these options:

      None – A log file is generated only at service start.

      Error – A log file is generated only when errors occur during BOD generation.

      Info – A log file is generated when errors and other events occur.

4   Click **Install Service**. If you did not log into the database as the SYSADM user, the system will prompt you to enter the SYSADM user name and password. The system will create a new database table that the service will read to generate BODs.

   After you install the service, you can no longer edit any of the fields in the VISUAL BOD Generator Service dialog box.

After you install the service, you are prompted to start the service. Click Yes to start the service. If you click No, the service is not started. You can start the service later through Microsoft Windows Services dialog box. If you do not start the service, no BODs will be generated by either the service or the VISUAL executables.

In the BOD Maintenance dialog, the Use Service check box is selected for the BODs that are generated with the service.

5 Click **Close** to exit the Infor VISUAL BOD Generator Service dialog box.

6 Restart VISUAL.

Removing the Infor VISUAL BOD Generator Service

If you would like the VISUAL executables to generate the BODs, or if you would like to reinstall the service on a different machine, you must remove the VISUAL BOD Generator Service.

To remove the VISUAL BOD Generator Service:

1 From the computer where you installed the service, right-click VBODGENSVC.EXE and select **Run as Administrator.**

2 Log into the database you are using with the service.

3 In the dialog box, click Remove Service. The BODs will be generated by the VISUAL executables.

Installing the BOD2DBSRVC service

When a BOD is sent to VISUAL, information is placed in VISUAL's inbox (the database table COR_INBOX_ENTRY). To transfer the information from the inbox to the appropriate locations within the VISUAL database, install the BOD2DBSRVC service. The BOD2DBSRVC service reads BODs sent to VISUAL and inserts or updates information in the VISUAL database.

To install the BOD2DBSRVC service:

1   Navigate to the directory where you store you VISUAL executables.

2   Launch BOD2DBSRVC.exe. Depending on the operating system you use with VISUAL, you may need to run BOD2DBSRVC.exe as an Administrator. For example, if you have installed the VISUAL executables on a Windows 7 machine, you must right-click BOD2DBSRVC and select Run as Administrator.

3   Log in to the VISUAL database.

4   Specify this information:

Service Name – Specify the name to use for this service. The name you specify is displayed in the Services section of the Windows Control Panel.

Log File Directory – Specify the location where the log files are stored. Two log files are generated. The bod2db.log records actions taken by BOD2DBSRVC program. For example, it records information when you install the service. The BOD2DBSRV.log lists the BODs imported from the inbox table to the other tables in your VISUAL database.

Service Poll Interval – Specify how frequently the service should check for new information in the inbox. Specify this value in seconds.

5   Click **Install Service**.

6   Click **Ok**.

The fields not described in this procedure are for importing data manually. We recommend that you do not import data manually.

Installing BOD2DBSRVC when using Single Sign On (SSO)

If you are using SSO, you must install the BOD2DBSRV service from a command line prompt with the System Administrator parameter.

1   Select **Start**, **All Programs**, **Accessories**.

2   Right-click **Command Prompt** and select **Run as administrator**.

3   In the Command Prompt line, specify <BOD2DBSRVC path>/BOD2DBSRVC.EXE -SYSADM.

Replace <BOD2DBSRVC path> with the path where the BOD2DBSRVC executable is installed.

Proceed with step 3 through 6 as described in "Installing the BOD2DBSRVC service" on page 9-11.

Uninstalling the BOD2DBSRVC

To uninstall the service:

1 Launch BOD2DBSRVC.exe. Depending on the operating system you use with VISUAL, you may need to run BOD2DBSRVC.exe as an Administrator. For example, if you have installed the VISUAL executables on a Windows 7 machine, you must right-click BOD2DBSRVC and select Run as Administrator.

2 Log in to the VISUAL database.

3 Click **Uninstall Service**.

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