



Infor Distribution FACTS Configuration Guide for Infor Operating Service

Distribution FACTS 9.3.2
Infor Operating Service 12.x

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About this guide

This guide provides information for the configuration and implementation of Distribution FACTS with Infor Operating Service.

Use this guide where Distribution FACTS is on-premises and Infor Operating System is in the cloud. Integrating to Infor OS CE (cloud-enabled) is referred to as a hybrid ION integration. Infor ION is a business process management platform that integrates applications, people, and business processes.

Intended audience

This guide is intended for the system administrator or consultant who configures Distribution FACTS for use with Infor OS.

Contacting Infor

If you have questions about Infor products, go to Infor Concierge at <https://concierge.infor.com/> and create a support incident.

If we update this document after the product release, we will post the new version on the Infor Support Portal. To access documentation, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1 Requirements

Ensure that all requirements are met.

Required products

Ensure that you have installed and configured these products:

- Distribution FACTS 9.3.2 or later

See the *Distribution FACTS Installation Guide*.

- Infor Operating Service release 12.x or later

Infor ION is one of the products included in the Infor technology platform - Infor Operating Service (OS). Infor Operating Service release 12.x or later, including Infor ION, can be deployed on your own server (on-premises), or in the cloud. On-premise installation is not covered by this integration configuration document.

If you are integrating FACTS with Infor OS in the cloud, the Infor Cloud team provisions Infor OS and its components for you. You must configure Infor OS to communicate with your on-premises application using the instructions in this guide.

SAML Session Provider is installed with Infor OS and must be configured correctly for your application.

See the *Infor Operating Service Installation Guide*.

- MSSQL version 15 or POSTGRESQL version 11 sequel database

When connecting from FACTS to Infor OS CE through inbox/outbox methodology either MSSQL version 15 or POSTGRESQL version 11 sequel database must be installed and configured, including the appropriate database ODBC driver. You must then configure both FACTS and Infor OS CE to communicate with your sequel database.

Note: FACTS does not run in the Infor Ming.le application. Infor Ming.le Homepages are used only to surface Monitor driven alerts and Workflow indicated tasks.

Required information

Obtain this information before you begin the integration:

- Credentials to connect to the application interface, for example, database user, password, server name, port or instance.
- Tenant ID that is used to connect the product to Infor OS in Infor ION. See *Chapter 5, Configuring your application* for information about the tenant ID and how to set it in your product.
- Name of the FACTS instance or logical ID that is used to connect with Infor ION. See *Chapter 5, Configuring your application* for information about how to set up the logical ID for your product.

Chapter 2 Configuration checklist

Follow this checklist to integrate this product with Infor ION:

| Complete | Task | Reference |
|--------------------------|---|---|
| <input type="checkbox"/> | Collect the documents listed in the next column from the Infor Support Portal. These documents are required for this configuration. | <i>Infor Operating Service Administration Guide</i> <i>ION Desk User Guide</i> <i>Infor ION API Administration Guide</i> |
| <input type="checkbox"/> | Understand the concepts of ION and BODs, and how these concepts relate to this product. | <i>ION Desk User Guide Cloud Edition</i> |
| <input type="checkbox"/> | Review the description of how this product interacts with Infor OS. | "Integration with other products through Infor OS" on page 17 "Concepts and definitions specific to this configuration" on page 18 |
| <input type="checkbox"/> | Choose REST/API IMS or inbox/outbox communication methodology. Understand the FACTS connection methods with Infor OS CE and decide upon the methodology to use. | "Configuring your application" on page 23 |

| Complete | Task | Reference |
|--------------------------|---|---|
| <input type="checkbox"/> | <p>Install and configure inbox/outbox sequel database and/or Infor ION API Backend Service.</p> <ul style="list-style-type: none">○ If inbox/outbox,<ul style="list-style-type: none">▪ install and configure the desired sequel database (MSSQL or POSTGRESQL).▪ Create inbox/outbox tables from Infor OS CE provided scripts.▪ Configure FACTS to communicate with the sequel database, testing until successful. | "Configuring your application" on page 23 |
| <input type="checkbox"/> | <p>Configure Infor OS</p> <p>Install and configure ION Services, including the Enterprise location, connector, and backend service.</p> <p>Download and save credentials.</p> | "Configuring Infor OS" on page 21 |

| Complete | Task | Reference |
|----------|---|---|
| □ | <p>Configure your product</p> <p>If not created/updated, run FACTS DO Code Generator for IO programs and XSDs.</p> <ul style="list-style-type: none"> • Configure Infor OS Management F/M in FACTS. <ul style="list-style-type: none"> ○ Select and specify data needed for either REST/API IMS or inbox/outbox connectivity. • Ensure background processes are not disabled in System Control F/M. • Check the Infor OS check box in Company Control F/M. | <p>“Configuring your application” on page 23</p> <p><i>Infor Distribution FACTS 9.3.2 Incremental Update Release Notes</i></p> <p><i>Infor Distribution FACTS 9.3.2 Online Help</i></p> |

| | | |
|---|---|---|
| □ | <p>Configure your product with ION to send and receive BODs:</p> <ul style="list-style-type: none"> • Upload in ION Desk Data Catalog the custom FACTS BOD zip files. • *Create in ION Desk, Mappings from custom FACTS BOD XLSTs to standard BODs. • Create in ION Desk, a connection point for the communication method chosen (REST/API IMS or inbox/outbox). • Specify inbound documents that can be received, using credentials as required from the communication method chosen. • Create in ION Desk, monitors & *workflows, any desired surfacing information (to be shown in Homepage widgets to specified users. Activate created monitors. • Create in ION Desk, a data flow using the connection point defined (including, if created, any workflows). Activate the data flow – activating the data flow activates the connection points. • Verify background processes are running for I1 and I2. <ul style="list-style-type: none"> ○ Background processes I3 and I4 should be set to Manual as no inbound BODs are expected at this time. • Perform an action that triggers an outbound BOD from FACTS that is being received by the ION Desk connection point that is entered in a Monitored and Activated data flow. • Verify the outbound BOD processed using FACTS background log viewer. | <p>“Configuring your application to send and receive BODs in ION” on page 30.</p> |
|---|---|---|

| Complete | Task | Reference |
|--------------------------|--|---|
| | <ul style="list-style-type: none"> • Correct if failure of outbound processing. • Verify the ION OneView processing of the received BOD. • Correct if error reported. • Verify the presence on the associated Alert (and/or *Task) widget of the information requested to the specified users' Homepage. | |
| <input type="checkbox"/> | Verify homepages for your product. | "Verifying homepages for your application" on page 42 |

Chapter 3 Configuration overview

Before you complete the configuration tasks, you must understand how this product is used with Infor OS. You must also be familiar with the related concepts and definitions.

Additional capabilities and features of Infor OS CE not integrated with FACTS are not presented in this document.

Infor Operating Service

Infor Operating Service (OS) Cloud Enabled (CE) is Infor's technology platform that supports fully integrated, industry-specific solution suites with mobile-first design, a consumer-inspired user experience, and science-driven analytics. It leverages the convergence of information, analytics, cloud computing, mobility, and social business.

FACTS offers a limited integration with Infor OS CE. This limited implementation is intended to give interested FACTS users a gateway experience with a small fraction of Infor OS CE features, providing them an integration opportunity to experience the future of Infor ERP technology moving into Cloud based applications through their familiar FACTS product.

Homepages

Homepages are a flexible and configurable way to present information and activities to users set up in Infor OS CE. Administrators can build pages for various groups of users, roles, departments, or business functions. You can select to display Homepage information from the library of available Infor widgets or build your own. Homepages are where FACTS Monitor and or Workflow information is surfaced, through Alert List Widgets and or Task List Widgets.

Infor ION

Infor ION is a business process management platform that integrates applications, people, and business processes. The platform converts data into the common language of standardized XML to

enable disparate business systems such as Infor products, third-party applications, and in-house developed applications to share that data.

The Infor ION platform simplifies connectivity and data sharing across connection points. It enables users to configure a routed infrastructure, set up workflows, and design and activate business event monitors and manage tasks and alerts.

Infor ION Desk components

- ION Desk is an intuitive, browser-based interface having many menu options which are used to easily configure and monitor ION platform processes. Not all ION Desk options and features are applicable when integrating with FACTS. These ION Desk menu options are available:
 - Connect is where, among other options, you can establish connection points between application end points. These endpoints can either be used for Infor applications, third-party applications, or to surface BOD messages using Monitors and or Tasks. For FACTS ION Desk Connect is used surface BOD messages using Monitors and or Tasks. Mapping of custom FACTS BODs to standard BODs, is done using these ION Desk options:
 - Monitors and Workflows is where you can monitor business events and create alerts when exceptions and/or activity occurs.
 - Monitoring starts after BODs that are published from application business events occur, arriving to a defined ION Connect connection point. Monitors are processes that run in the ION Event Management engine and evaluate these arriving BODs, as they are picked up at that connection point, by applying configurable pre-defined business rules. The configurable predefined set of business rules that the monitoring engine can apply are: comparison conditions, value change conditions, and document overdue timer-based rules. When inbound BODs are detected matching the configured rule(s), these are reported as alerts to the business users' Homepage Alerts List widget. The distribution list used to surface these reported alerts is part of a monitor definition.
 - Workflow is used to model and run business processes such as authorizations, work distribution, or task-driven workflows. They are reported as tasks to the business users' Homepage Tasks List widget. The distribution list used to surface these reported tasks is part of a workflow definition. Deactivation of a data flow between connection points wherein any outstanding tasks are incomplete (the users have not yet performed the indicated task) will generate error BODs for those tasks.
 - For authorizations, as an example, you can use an approval workflow to approve a purchase order or to sign off a new item, by using the existence of the BOD passing through the data flow or upon criteria determined within the definition of the workflow. Any such approval is perfunctory in the integration with FACTS. FACTS is not connecting to any other application connection point instance at this version. The workflow ensures that all tasks for a certain event are being distributed and executed by different users. The advantage of using the Workflow is that you can model how these tasks are performed, for example sequential or in parallel.
 - Data Catalog is where the Custom FACTS BODs are uploaded and registered as available to a designated connection point.

- OneView is where a user can monitor any processing errors by drilling into the events that have come through ION.

For more information about these components, see the *Infor ION Desk User Guide*.

Infor Ming.le

FACTS is not a Ming.le enabled application. Information here applies only to other Ming.le enabled applications.

Infor Ming.le is a web-based application framework that provides a common user interface for Infor applications, third-party applications, and in-house developed applications integrated through Infor ION. It is a centralized platform for social collaboration, business process improvement, and contextual analytics.

Infor Ming.le provides drill-back capability so that users can navigate across the applications to track transactions, the transfer of data, and report updates. Additionally, Infor Ming.le provides an infrastructure for sharing content with context applications.

Infor Ming.le uses homepages, configurable by users to organize information and activities at a high level to focus on critical areas of concern.

Within Infor Ming.le, you can use ION API, a managed API layer across all applicable Infor and non-Infor APIs, allowing existing APIs to be presented in a standardized, managed, and controllable way.

Infor Ming.le uses Infor Federated Services (IFS) for centralized authentication.

Infor Ming.le is available as a mobile app, supported by iOS, Android™, and Windows Mobile operating systems.

Integration with other products through Infor OS

FACTS uses different integration methods to communicate with other applications that use Infor OS. At this release, there are no integrations with other products through Infor OS.

Hybrid ION integrations

Integrating FACTS with Infor OS CE is referred to as a hybrid ION integration.

A hybrid ION integration requires that an instance of Infor OS CE is provisioned for you in the multi-tenant Infor cloud.

Then the ION Enterprise Connector is installed on your local server to provide communication between Infor OS CE and FACTS. This enables the exchange of BODs using the ION platform. FACTS interacts with ION Connect, exchanging BODs using inbox/outbox methodology or REST/API through IMS using web services.

Point to point integrations

No point to point integrations are available at this release.

BOD integrations

An outbound operation typically begins when a user performs an action in FACTS that requires a data exchange with another ION-enabled product. These actions either surface a subscribed alert or require a data update to system of record information. Adding a new vendor, for example. A custom Business Object Document (BOD) XML message is generated by FACTS and delivered either to the sequel database outbox table or processed by REST/API via IMS. At scheduled intervals ION connects to the outbox and retrieves the BODs from it.

In ION Desk, a connection point is set up for each product or site that can send or receive BODs. If you add products later, you must add connection points for them, as needed. The connection point defines the information needed to connect to the application database, using inbox/outbox or REST/API IMS methodology. It also holds a list of all the BOD documents that the application can send or receive, when applicable. Use the Modeler in ION Desk to define these document flows.

Document flows are set up in ION Desk, Connect, Data Flows.

ION routes BODs according to the document flows between BOD-enabled products. FACTS uses these document flows to surface custom FACTS BOD messages to widgets on a user's Homepage. Outbound custom FACTS BODs are not expected to flow to another product at this release.

BOD event triggers

BOD Event Triggers are captured by IO procedures on FACTS files and using background process I1, potential outbound information is written into the SMPUBQ file. The custom FACTS BOD is generated and placed into holding files SMXOUH and SMXOUL. The I2 background process uses the two files to update the sequel database outbox table or create an outbound REST/API IMS call to the active Infor OS connection point for inbox/outbox or REST/API IMS respectively.

Inbox / Outbox

FACTS communicates Business Object Documents (BODs) to and from ION using the standard Infor Application Connector. The Infor Application Connector uses the following set of SQL Server Tables for this communication:

- COR_OUTBOX_ENTRY
- COR_OUTBOX_HEADERS
- COR_INBOX_ENTRY
- COR_INBOX_HEADERS

Refer to the ION Technical Reference Guide for more details on these tables and how ION uses them to facilitate BOD flow.

Concepts and definitions specific to this configuration

You must understand these terms and how they are defined in this application.

Tenant ID

The tenant is a container for accounting entities and locations and is required in each BOD. The value of the tenant must be the same in all of the applications that exchange BODs. Data is not shared or accessible between tenants.

See the information about Using Tenants in the *ION Desk User Guide*.

A tenant ID is provided when provisioning Infor OS CE. A tenant ID must be entered in FACTS Infor OS Management F/M (SMF951) during configuration.

The tenant ID is a container for the business as a whole, encapsulating all accounting entities, which are FACTS companies, and locations, which are FACTS warehouses.

Accounting entity

An accounting entity usually represents a legal or business entity that owns its general ledger. Every transaction belongs to only one accounting entity. An accounting entity can also be defined as the owner of certain master data within an enterprise.

For FACTS, companies are considered accounting entities. Companies are set up in Company Control FM.

Location

A location is the physical location that is associated with data or transactions. The location can be, for example, a warehouse, a manufacturing location, a project location, or an office. A location is required for all transactional BODs and is usually the location from which a transaction or record is generated.

For FACTS, warehouses are considered locations. Warehouses are set up in Warehouse FM (ICF970).

Logical ID

The logical ID is a unique identifier used in the communication of data between the products in the tenant's environment. In ION Desk, the logical ID is defined by specified connection points. The logical ID of the connection point being to used must be entered in FACTS Infor OS Management F/M (SMF951) during configuration.

For more information, see the *Infor Operating Service Administration Guide*.

Chapter 4 Configuring Infor OS

This section describes how to configure Infor OS CE with FACTS. This is a hybrid integration between FACTS on-premises and Infor OS CE.

The Infor Cloud team provisions Infor OS CE and its components for you. Contact to the Infor Cloud Team for this step. After provisioning is complete, configure Users who have access to log into Infor OS. Then, configure communication and BOD exchange between Infor OS and FACTS.

Importantly, you must decide to connect from FACTS through REST/API IMS methodology or inbox/outbox methodology. If using inbox/outbox methodology the selected sequel database must be already installed and set up with appropriate tables and permissions. During installation of the Enterprise Connector, inbox/outbox methodology needs to supply the database type, port, and other parameters which should be noted during the database installation.

Connecting Infor OS CE to FACTS

Connecting Infor OS CE and FACTS is done through the Enterprise Location using the Enterprise Connector. The Enterprise connector requires Java. Install JRE, if not present, when and where the connector is installed.

Creating a new enterprise location

You must create a new Enterprise Location in ION Desk, specifying the Name and Description fields of the new Enterprise Location, before you install the Enterprise Connector.

See the *Infor ION Desk User Guide - Cloud Edition* for instructions for creating a new location.

Installing the enterprise connector

The Infor Enterprise Connector arranges the connectivity between the ION platform in the cloud and a local, on-premises application. This connectivity supports the exchange of ION BODs, flat files, SQL database connections, and API service calls. The Enterprise Connector is installed on your local server and is required when you are integrating your on-premises FACTS with Infor OS CE.

You may need to provide a user with read/write access on your server. The user name and password may be required when you configure data flows for the specific integration that uses the Enterprise Connector.

See the *Infor ION Desk User Guide - Cloud Edition* for instructions for installing the Enterprise Connector. Install Java JRE, if not already present, on the same machine.

Installing the backend service for IMS

The Infor ION Messaging Service (IMS) is used when connecting FACTS with Infor OS CE using REST/API calls. Install, and download credentials for later use when the chosen communication method is REST/API.

In Infor OS CE, menu option Infor ION API, Authorized Apps, click the Plus symbol to create the backend service. Create Service Account and enter the users relevant. Download and save the credentials. See *Infor ION API Administration Guide, Registering the Client Application*.

Chapter 5 Configuring your application

You must set up this application so that it can generate BODs and place them in a message outbox from which Infor ION Connect can retrieve them.

You must also set up the inbound message configuration, so that BODs sent to this application can process those messages. FACTS does not provide for inbound messages at this release.

These actions and options are available in FACTS:

- Generation of custom FACTS BODs, when indicated
- Stored Procedures for communication methodology
- Generatable IO programs and XSDs/XMLs
- XSLT stylesheets for mapping custom FACTS BODs to standard BODs

Setting master data to standardized values

To ensure consistent master data between integrated applications, use the ISO standard values where applicable.

For example, use FACTS Unit of Measure Code F/M to specify the ISO standard value if different from the one entered. Use FACTS Company Control F/M to enter USD for currency code.

Connecting FACTS to Infor OS CE

FACTS can be configured after Infor OS CE provisioning and configuration. Complete that *Chapter 5, Installing Infor OS* first. Also, decide on whether to connect with Infor OS CE using REST/API IMS or inbox/outbox methodology. This decision determines whether you will be using REST/API IMS or installing a MSSQL or POSTGRES SQL sequel database, as the defined ION Desk Connection Point.

REST/API IMS or inbox/outbox methodology

Only one connection methodology can be active at a time. If no waiting outbound or inbound BODs exist, the methodology can be changed. For example REST/API IMS could be configured and in use, and if that was switched to use inbox/outbox, the configured MSSQL or POSTGRESQL could be used. Because each method may use a different Logical ID, and the Logical ID is embedded in the custom FACTS BODs, switching between connection types must only occur when there are no BODs waiting.

Using a sequel database incurs the additional responsibility of setting up appropriate users, roles, tables, and database maintenance, including establishing connectivity with FACTS. It also provides a middle ground for BOD storage. Outbound custom FACTS BODs can sit in the database waiting for the activation of a valid ION Desk connection point and future inbound BODs can sit in the database waiting for FACTS background process activation to be retrieved.

Installation of a sequel database must be vetted through FACTS Database Definition (DOE400) by clicking the Test button until successful. Then the indicated database can be assigned in FACTS Infor OS Management F/M.

Sequel Database Tables and Columns must be created using the downloaded material from your provisioned Infor OS CE. From ION Desk, menu options Configuration/ION Service, tab option Configuration Files, download option Scripts to Create Inbox/Outbox. Select the scripts appropriate for your chosen sequel database.

Connecting to a sequel database

After the desired sequel database and ODBC drivers are installed and configured, complete this information.

1 Click **System Management>Infor OS Menu>Database Definition**.

2 Specify this information:

Database ID - The database ID is a system-wide identifier for the database connection information. It is used by the CSSQL object to get the connection string and table information for the ION database.

Description - This is a free-form entry to describe the database connection. It can be used to indicate test versus live database environments.

Type - Specify the database type: Microsoft SQL Server or PostgreSQL.

Server - This is the IP or network address for the system hosting the SQL Server environment. This setting is not used by the Infor OS connection, but is kept for backward compatibility with prior Database Definitions.

DB Name - This is the name of the database instance within the SQL or PostgreSQL server environment. This setting is not used by the Infor OS connection, but is kept for backward compatibility with prior Database Definitions.

Usage Type - The usage type is used to indicate the database definition for Infor OS. I-Inbox/Outbox for Infor OS is the only usage type supported at this time.

Connection String - The connection string can be any valid method for connecting to the SQL Server database via the PxPlus [ODBC] method. At minimum, a DSN and Database section must exist in the connection string. The DSN can provide the required information, whereas the Database is required for stored procedure maintenance.

Refer to this list of possible connection string settings to be used.

Driver - Usually set to SQL Server but can be a different driver name if required from the operating system

Database - The database name to connect to / use when updating the stored procedures

Server - The server name / IP address of the SQL Server environment

Integrated Security - This instructs the connection to use the domain authentication for the process instead of username and password. Using this will allow the FACTS server or the credentials in which the process is running to authenticate to the SQL Server.

Username - Plain text user name used to connect to the server. This should not be used if Integrated Security is used.

Password - The password used to connect to the SQL server when supplying a username and password combination. The password will be replaced with asterisks when displayed to the user.

Inbox Header / Entry - The table names used to store the ION information for incoming messages to the system of record (SOR). The defaults are COR_INBOX_ENTRY and COR_INBOX_HEADERS. These table names are substituted when updating the stored procedures which will be covered later in this document.

Outbox Header / Entry - This is the table names used to store the ION information for outgoing messages from the system of record (SOR). The defaults are COR_OUTBOX_ENTRY and COR_OUTBOX_HEADERS. These table names are substituted when updating the stored procedures which will be covered later in this document.

Inbox Days - the days to maintain completed inbound records in the database before the FACTS background processor responsible removes them. FACTS is not expecting inbound records at this release.

- 3 Click **Save**.
- 4 Click **Test** until you receive the Connection Successful message.
- 5 Click **Done**.

You must disable background processes in FACTS to continue the configuration.

Disabling background processes

- 1 Click **System Management>Infor OS Menu> System Control F/M**.
- 2 Click the **Settings**.
- 3 Check the **Disable Background** check box to indicate that background processes will not be launched by API program SMU954. Note that this setting initially defaults to selected (checked) to allow system administrators time to complete any data conversion processes and handle any necessary tasks before the background processes start. After the conversion is finished and all

initial setup tasks are complete, the **Disable Background** setting in System Control F/M must be changed to unselected (unchecked), so the SMU954 program will start processing background tasks. To modify the Infor OS Management FM (SMF951) program, you must first check the **Disable Background** check box.

- 4 Click **Save**.
- 5 Click **Exit**.

Managing Infor OS

- 1 Click **System Management>Infor OS Menu> Infor OS Management FM**.
- 2 Specify this information:

General tab

1. Tenant ID

Specify the Tenant ID that identifies this system to Infor OS. The tenant is a container for accounting entities and locations and is required in each BOD. The value of the tenant must be the same in all of the applications that exchange BODs. Data is not shared or accessible between tenants.

2. OAGIS Release

Specify the base AOGIS release number.

3. Infor BOD Version

Specify the BOD version number for Infor.

4. Connection Method

Select a connection method for Infor OS: 0 - N/A, 1 - Inbox/Outbox, 2 - REST/API. Specify the N/A to prevent any communication with Infor OS. When modifying the connection method from Inbox/Outbox, a warning is displayed if there are any unprocessed records remaining in any database set up for use with Infor OS. Documents may be orphaned. If you change from one method to another, the Logical ID is automatically changed to reflect the LID for the new connection method in any existing SMXOUL records.

5. Retry Interval

Specify the number of minutes to wait before retrying when the connection to Infor OS fails.

Inbox/Outbox tab

1. Logical ID (LID)

Specify the logical ID that identifies the Infor OS connection point. The first two sections of the lid are "infor" and "facts", if that is the what will be assigned to FACTS as the root of the LID.

2. Database ID

Specify the database ID that identifies the ION database. If you change the database ID, a message is displayed, indicating if there are any unprocessed records remaining in any other database used for Infor OS.

3. Inbox XML Destination

Specify the ION Inbox XML delivery destination: T-TCP/IP, D-Polling Directory, N-N/A.

IMS tab

Using REST/API IMS requires entry of REST/API IMS parameters that are downloaded from the provisioned instance Backend Service of Infor OS CE, Infor ION API, and Authorized Apps. Access the created FACTS backend service in Infor OS Management FM to click the Download Credentials button.

1. Logical ID

Specify the logical ID that identifies the Infor OS connection point. The first two sections of the lid are “infor” and “facts”, if that is the what will be assigned to FACTS as the root of the LID.

2. IMS Parameters

Click **Import** to populate the IMS credentials file information in an .ionapi file. These parameters can only be imported from a *.ionapi file that is generated when Infor OS is provisioned. You cannot modify parameter information. Optionally click **Clear** to remove all of the settings. Click **Test IMS** to determine if the current .ionapi file works correctly.

6 Click **Save**.

7 Click **Exit**.

Run the FACTS DO Code Generator. Select IO programs and XMLs/XSDs. The generated IO programs control what action causes FACTS to generate outbound custom FACTS BODs. When configuring Infor OS CE, the generated XMLs/XSDs are imported into the ION Desk Data Catalog.

Running the DO Code Generator

Ensure all API records are finalized and the resulting BOD are generated successfully, then complete this information.

1 To access the Documentation menu, specify **do** in the main menu field.

2 Select **DO Code Generator**.

3 Specify this information:

Run By – Module

Modules - All

Files - All

APIs - All

4 Check the **Sting Templates** and **IO Programs** and **Infor OS XSDs** check boxes.

8 Click **OK**.

These FACTS background processes are used to send and receive BODs:

- I1 – a continuous process that writes SMPUBQ for triggered records. If Company Control F/M is enabled for Infor OS then SMXOUH and SMXOUL tables are updated with the appropriate custom FACTS BOD information
- I2 – a continuous process that may initially be set to manual until the FACTS to Infor OS connection point and data flow is successfully created. This process reads the SMXOUH and SMXOUL tables to update inbox/outbox records or to communicate using REST/API IMS with the IMS connection point.

Inbound BODs are not expected so the I3 and I4 background processes should be set to manual.

Changing the schedule for a background process

- 1 Click **System Management>System Dashboards Menus>Background Scheduler**.
- 2 Highlight the background process for which you want to modify the schedule.
- 3 Click **Edit**.
- 4 On the Background Process Schedule screen, the current schedule information is displayed on the left side of the screen.
- 5 On the right side of the screen you can modify the Frequency Type for the schedule: A-Manual, H-Hourly, D-Daily, W-Weekly, or M-Monthly.
- 6 For each Frequency Type, you can modify the number of minutes to wait before retrying when a process fails to start.
- 7 Based on the frequency type you specified you can enter additional scheduling information:

| Frequency Type | Editable Information |
|----------------|---|
| Hourly | Minute of the Hour to run the process |
| Daily | Start Time for the process |
| Weekly | Day of the Week to start the process; Start Time for the process |
| Monthly | Day of the Month to start the process; Start Time for the process |

- 8 Click **OK** to save your changes and return to the Background Scheduler Dashboard.

Configuration

Use Infor OS Management F/M to specify this required information.

- Connection Type decision and configuration should be complete before proceeding.

- Using the procedures in this chapter, specify information according to field requirements, based on decisions made and values provided during product installation and configuration.

Activation

Use Company Control F/M to enable accounting entity interaction with inbox/outbox or REST/API IMS and Infor OS CE. The Infor OS check box, when selected, enables the FACTS related Infor OS CE background processes I2 (outbound), I3 (inbound), and I4 (cleanup) to function.

- FACTS I3 and I4 background processes may be set to “Manual” as inbound BODs are not expected at this release.
- Disabling background processing at the system level in System Control F/M turns off all background processing, including custom FACTS BOD generation and delivery.

Using Company Control FM to activate Infor OS

- 1 Click **System Management>System Dashboards Menus> Company Control FM**.
- 2 On the Modules Used tab, check the **Infor OS** check box.
- 3 Click **Save**.
- 4 Click **Exit**.

Configuring FACTS

Use the procedures in this chapter to follow these steps to configure FACTS through activation.

- 1 Entry/testing using stored procedures based on indicated database management type.
- 2 Specify Infor OS values in System Control FM.
- 3 Set I2 and I3 background processes to manual for testing.
- 4 In Company Control FM check the **Infor OS** check box.
- 5 Test outgoing: SO DOC – uses I1 background process to write to SMPUBQ then removes SMPUBQ and writes to SMXOUH/SMXOUL.
- 6 Using UTLOOK, export the XML to be generated to verify the data is as expected.

Setting up logical IDs, tenants, accounting entities, and locations in FACTS

Use the procedures in this chapter to set up this information in Infor OS Management FM.

Chapter 6 Configuring your application to send and receive BODs in ION

This section describes how to configure your application to communicate with ION. Integrations between this application and other applications use ION to send and receive BODs. For details about a specific integration, see the appropriate integration guide.

Tasks completed by the Infor Cloud team

The FACTS development team has already set up FACTS so that it can generate custom BODs and place them in a message outbox from which Infor ION Connect can retrieve them.

Installing and configuring the Infor Enterprise Connector and ION Messaging Service

Connecting Infor OS CE and FACTS is done through the Enterprise Location using the Enterprise Connector. The Infor ION Messaging Service (IMS) and Backend Connector is used when connecting FACTS with Infor OS CE using REST/API calls. Refer to *Chapter 5, Configuring Infor OS* for instructions.

Loading custom FACTS BODs to ION Desk Data Catalog

You define the custom FACTS BODs to be uploaded from within FACTS using the DO Code Generator. If not already run, check these options: all modules, IO programs and Infor OS XSDs options and run the DO Code Generator. Custom FACTS BODs are created in the FACTS “.../ion/Nouns” directory. Each directory there must be individually compressed into a zip file using the name of the Noun directory followed by “.zip”. That zip file must be there in the “.../ion/Nouns” directory. Then within ION Desk, Data Catalog, Object Schemas, click the Import icon to select, one by one, each zip file from the “.../ion/Nouns” directory for import. When changes are made to FACTS files and their custom FACTS BOD APIs and new custom BOD zip files are made, on import into the

Data Catalog, they overwrite/replace any existing one of the same name. After uploading, you may want to move the zip files to a stored location so future creation does not overwrite them.

Mapping of custom FACTS BODs to standard BODs

You create mappings from custom FACTS BODs to standard BODs. Mappings are predefined and delivered with FACTS in the “.../ion/Mapping” directory and have a file extension of “.xslt”. Within ION Desk, Connect, Mappings, click the tile to add a graphical mapping. Give the mapping a name, a description, a source document from FACTS that has not been mapped yet, and the target document of the corresponding standard BOD, then, click the XSLT Editor tab, choose to import the corresponding XSLT and say “yes” to the manual change window. Save and continue until all custom FACTS BODs are mapped. The process is inverted for inbound standard BODs which need to be mapped to custom FACTS BODs prior to arriving in FACTS.

Understanding connection points and data flows

You create connection points in ION Desk, Connection Points. Connection points records the communication information that the ION platform needs to connect to FACTS. At least one connection point must be defined for each application instance that integrates to the ION platform. If FACTS is sending BOD information to another application or output file using the ION platform, there must be two created connection points, one for FACTS and one for the other application or output file. These connection points are the two end points in a data flow. At this release of FACTS, there is no other application expected to need to create any other connection point than FACTS. Optionally, an output to file connection point could be created to record the BODs coming through the data flow.

For each connection point created, you indicate the BODs that can be sent or received by that connection point. These correspond to the custom FACTS BODs that are used in this integration.

In an integration between two BOD-enabled connection points, data flows are set up which manage the BOD flow between the two connection points. Montiors (aka Alerts) and Workflows (aka Tasks) are surfaced against data flows. Without a data flow the Alerts Widget on the Homepage nor the Tasks Widget on the Homepage will display information.

A connection point can be used multiple times in one or more data flows. Connection points are not activated separately. When you activate a data flow, any associated/included connection points within that data flow are activated.

See the section on ION Connect Modeling in the *ION Desk User Guide* for additional information about connection points and data flows.

Creating a connection point

Create a connection point using the appropriate communication method and required credentials to interact with custom FACTS outbound BODs.

Creating the Inbox/Outbox connection point

1 In ION Desk, select **Connect > Connection Points**.

2 Click **Add > Infor Application**.

3 In the left pane, specify these values:

| Application Properties | Value |
|------------------------|--|
| Name | Specify a name for the connection point. |
| Description | Optionally, specify a description for the connection point. When creating a connection point for a hybrid integration, specify the below value. |
| Location | Select the Enterprise Location you created in the chapter Configuring Infor OS. |
| Logical ID Type | Specify a type. |
| Logical ID | Display only, built for you. This is the value needed in FACTS for the Logical ID field. |

4 In the right pane, for Connection, specify this information:

| Application Properties | Value |
|-------------------------------------|--|
| Database Driver | Only PostgreSQL or MSSQL are available for FACTS. |
| User Basic Settings radio button | Selected |
| Host Name | Specify the host name of the SQL server that hosts the database. |
| Port Number | Port Number: Specify the number of the port that is used to connect to the database. |
| Schema Name | Specify the name of the database. |
| URL | Display only, built for you |
| User Name | Database username to use |
| Password | Password for the username |
| Delete Processed Messages check box | Selected |

5 Click **Test** to verify whether the connection is working. A message is displayed that indicates whether the test is successful. If the test is not successful, correct the connection details and try again.

6 In the right pane, for Documents, click “+” to add all custom FACTS BODs this connection point is expected to send and or receive.

- 7 Click **Save**.
- 8 Click **Back** to return to the list.

Connection points are not activated separately. When you activate a document flow, the associated connection points are activated.

Creating the IMS connection point

- 1 In ION Desk, select **Connect > Connection Points**.
- 2 Click **Add > IMS via ION API**.
- 3 In the left pane, specify these values:

| Application Properties | Value |
|------------------------|--|
| Name | Specify a name for the connection point. |
| Description | Optionally, specify a description for the connection point. When creating a connection point for a hybrid integration, specify the below value. |
| Logical ID Type | Specify a type |
| Logical ID | Display only, built for you. This is the value needed in FACTS for the Logical ID field |

- 4 In the right pane, for Connection, specify this information:

| Application Properties | Value |
|-------------------------------|---|
| Application has IMS End Point | Deselect |
| ION API Client ID | Copy and paste the data as imported into the "CI" field in FACTS Infor OS Management F/M. |

- 5 In the right pane, for Documents, click "+" to add all custom FACTS BODs this connection point is expected to send and or receive.
- 6 Click **Save**.
- 7 Click **Back** to return to the list.

Connection points are not activated separately. When you activate a document flow, the associated connection points are activated.

Defining application documents for the connection point

- 1 In ION Desk, Connection Points, select a connection point.

- 2 Click the **Documents** tab of your connection point and select all the custom FACTS BODs that can be sent or received by this connection point. For each document, specify whether it can be sent, received, or both. For FACTS, the only documents listed should be the custom FACTS documents.

See the list of inbound and outbound documents in the Appendices. The list of documents that you define for this connection point must match that list.

See the *ION Desk User Guide*.

Note: If you, later, remove a document from a connection point that is in use in a data flow for that connection point, an error is reported in the data flow messages pane.

Configuring a data flow between connection points

Note: Usually, data flows are configured and activated in conjunction with integrations between FACTS and another connection point. In that case, follow the steps in the appropriate integration guide. If you want to send documents or messages to another ION-enabled application and the integration is not supported by Infor, see the *ION Desk User Guide* for the steps to create a data flow. Custom FACTS BODs must, if used by another integrated application, be mapped using the mapping icon in the data flow to the expected standard BOD. FACTS does not create standard BODs natively.

Monitors (aka Alerts) and Workflows (aka Tasks) are surfaced against data flows. In other words, without a data flow the Alerts and Tasks Widgets on the Homepage do not display information. To use Infor OS CE to surface information, a data flow must be created even if that data flow does not have an “ending” connection point to some other application. This type of data flow is valid to create. The “ending” connection point does not have to be another application. It can, instead be a file output to a specific location/name.

See the section on ION Connect Modeling in the *ION Desk User Guide* for additional information about connection points and data flows.

Defining the data flow

Every flow in the modeling canvas has a start and an end. For a new data flow, only the start and end are shown. You can add items to the flow, using this general method.

- 1 In ION Desk, select **Connect > Data Flows > Add** (Document Flow).
- 2 Click the Application icon in the toolbox. If the Application icon is not visible, you need to select and view the details of a **Flow Name**.
- 3 Click the line where the application must be added. Alternatively, drag the item from the toolbox to the line where it must be added.
- 4 An Activity box is added.
- 5 Click the Activity to view or change the properties in the Activity Task pane.

- 6 Click **Add** to add a connection point to the Activity.
- 7 Repeat steps 2-6 to add another application and its connection point to the flow.
- 8 Click the Document icon between the applications to define the documents that flow from the first application to the second application.
- 9 Repeat steps 2-6 to drag toolbox icons desired to perform any transformations, mappings, workflows, or other icon options needed in the progress of this data flow.
- 10 Save the data flow.

To delete an item dragged into a data flow, right-click it and select **Delete**.

Activating the data flow

A new or changed data flow can be used in ION after it is activated. This section describes how to activate a data flow.

Note: If you encounter problems during this setup, you must stop and restart the ION service.

- 1 In ION Desk, select **Connect > Data flows**.
- 2 Select one or more data flows.
- 3 Click **Activate**.
- 4 Determine the appropriate action:
 - If you receive a message that the activation was successful, click **OK**. Your changes are effective immediately.
 - If you receive a warning message, the data flow is already activated.
 - If you receive an error message, the data flow cannot be activated.

See the *Infor ION Connect Administration Guide* for information about activation errors.

Creating and activating a monitor

Custom FACTS BODs received by a connection point can be configured to trigger messages in the Alert List widget of a user's Homepage, using Monitors watching for incoming BODs

- 1 In ION Desk, select **Monitors & Workflows > Monitors > Add**.
- 2 In the left pane, specify a name and a description.
- 3 In the right pane, complete these actions:
 - For Documents, click "+" and add the documents to watch for or monitor.
 - For Attributes, click "+" and add the attributes of interest to watch or monitor.
 - For Conditions, select the "+" and create the conditions of interest by completing this information:

- Create a unique name
 - Specify the type (Comparison vs Existence provides later choices)
 - Select the Attribute of interest (only one at a time)
 - Comparison operator or Existence/Nonexistence (based on type chosen earlier)*Concatenation of conditions is allowed when multiple conditions are entered.
- 4 For Rule, specify the rule type and select the condition defined in the Conditions step.
 - 5 Ensure Alert each time is selected.
 - 6 For Alert, specify the display message. *All attributes selected earlier are available in the message display.
 - 7 For Distribution, select Simple, click “+” and indicate the type; use the search to add recipients.
 - 8 Click **Save**.
 - 9 Click **Activate**.

Note that Drillbacks, Escalations and Reminders, and Workflow Settings are not used for FACTS.

Monitors are surfaced to the distribution list of users on those user’s hompages containing the Alert List Widget.

Creating a workflow

Data flows receiving custom FACTS BODs can have Workflows inserted. These workflows interrupt the data flow until an action is completed by users accessing their Homepage Task List widget. This interruption of the data flow has no impact on the associated FACTS processes so the task is a perfunctory means to bring explicit attention to processes in FACTS.

- 1 In ION Desk, select **Monitors & Workflows > Workflows > Add**.
- 2 In the left pane, specify a name and a description.
- 3 In the right pane is the workflow build canvas showing two dots, with a lower pane showing “Workflow Properties”. Only the Parameters property is used for FACTS. In the lower pane select the “+” to add parameters. Each parameter entered is either coming into the workflow from a BOD or leaving the workflow into a BOD field. Specify the desired parameters.
- 4 Using the Task icon, click and drag a task into the canvas between the two dots and release. In the lower pane are “Task Properties”. Only the Task, Content, Actions, and Distributions properties are used for FACTS.
- 5 For Task, specify this information: name, description, message as it should appear to the user in their Task List Widget on their home page, priority, and Not applicable for due date.
- 6 For Content, the parameters specified earlier are available. Parameters that are displayed to the user are to be shifted to the right. Parameters that are not displayed remain or are shifted to the left.
- 7 For Actions, click **Done** if the user only must acknowledge the workflow. Select the Custom Action button and use the drop box to select the parameter whose value will

be set based on the action. For the Custom action button, select “+” to add a row to the list. Specify the Button name as the user will see it, and the value to assign the selected parameter if the user selects this button; repeat for each button. *It would be unusual to have only 1 button for Custom Action buttons.

- 8 For Distribution, select Simple, click “+” and indicate the type, use the search button to add recipients.
- 9 Click **Save**.
- 10 Click **Activate**.

Using the workflow in a data flow

Custom FACTS BODs received by a connection point can be configured to trigger messages in the Task List widget of a user's Homepage.

- 1 In ION Desk, select **Connect > Data Flows**
- 2 Select an existing Data Flow. If the workflow is already created, you can insert the workflow as you are creating a new data flow.
- 3 Drag the Workflow icon into the data flow at the point for user input.
- 4 Complete these steps for the workflow:
 - In the lower pane FACTS uses Properties, Attributes, and Parameter Mapping. Optionally enter a name and description. Use the drop box to select the desired workflow.
 - For Attributes use the “+” to select BOD attributes of interest to the workflow.
 - For Parameter mapping, assign the workflow parameters to the BOD attributes of interest.
*FACTS, when using custom action buttons in workflows, provides a BOD field “InforOS_free_1” in all outbound FACTS BODs for use in receiving the action value of custom action workflows.
- 5 If the workflow contains only the Done button designation there is nothing more to do. Complete steps 6-9 if the workflow has custom button action.
- 6 When a custom button action workflow is placed it would normal be followed by a filter to route the document flow according to the custom action button selected. Use the Filter icon to drag the filter into the data flow after the workflow.
- 7 In the lower pane FACTS uses Properties, Attributes, and Conditions. For Properties, enter a name and a description
- 8 For Attributes From Content, select the “+” to select the value passed out of the workflow via the “InforOS_free_1” BOD element. From Header remains empty/blank.
- 9 For Conditions, select the “+” to build the condition which indicates document flow would continue. Once saved, verify, or select if not selected, the Used Condition drop box for the named condition just created.
- 10 Click **Save**.

11 Activate, or reactivate, the data flow.

Workflows are surfaced to the distribution list of users on those user's hompages containing the Task List Widget.

See the ION Desk User Guide.

Publishing BODs

You publish BODs so that ION can retrieve them from your message outbox. You can publish BODs for general use by any product that subscribes to the BODs through Infor ION. After you perform an initial data load from your application, you verify that data is flowing out of the application into ION. For details about a specific integration, see the appropriate integration guide.

For an ION-based integration between this application and another application, see the appropriate integration guide for these instructions:

- Setting up the document flows
- Performing any additional configuration of the applications that is required for that integration

You can then use the steps in the integration guide to publish the BODs.

Starting applications and services

Start these applications, services and processes if they are not already running:

- FACTS
- Other applications with which you are communicating through Infor ION
- ION Service

Use the ION Grid Management user interface to verify that the ION Service is running. See the *ION Grid Administration Guide*.

Initial data load

During normal processing custom FACTS BODs are published when a user changes data or completes a transaction. When you start a new integration with another application connection point instance, you must manually generate the custom FACTS BODs. Custom FACTS BODs pass the current set of data from FACTS to the other application connection point instance, so that the communicating systems are synchronized. The custom FACTS BODs are selected and sent using the FACTS Infor OS On-Boarding function.

Sending the initial data load

There is no need to perform an initial data load for FACTS. The FACTS Infor OS On-Boarding function is not used for this integration at this release.

At later releases, to perform an initial data load into BODs that are placed in the message outbox:

- 1 Click System Management>Infor OS Menu>Infor OS On-Boarding.
- 2 Specify the company. It must be valid in Company Control F/M and the Enable Inbox/Outbox check box must be selected.
- 3 In the browser each line displays this information.
 - The processing tier for the Infor OS process
 - API name and description
 - The date the process was last pushed and the user initials of the push.
 - The status of the last push process. The status indicates if it is in-process. Possible values are:
 - Waiting – Status flag of SMPUSH = blank. Initial Records and Num Remaining are also blank – indicates that this Ult-P record has not been put into SMPUBQ yet.
 - Processing – Status = “P”. Initial records are known, meaning the Ult-P file has been processed and all records were put in SMPUBQ, but there are still records being processed in SMPUBQ. Num Remaining will show # of records still in SMPUBQ and SMXOUH.
 - Complete - Status = “C”
 - The number of initial records and the records remaining during a process.
 - The percentage complete for processing.
 - Ultimate Parent (Ult-P), API Name, Description, Last Push Info (Date, Who, Initial Records, # Remaining, Status, % complete) from SMPUSH using alt-key 2
- 4 Use these options to manage records.
 - Push Tier – Processes all records in the browser; refreshes when done; shows progress bar while processing
 - Push All – Processes all records in the browser; refreshes when done; shows progress bar while processing
 - Push Line – Processes selected line from the browser; shows warning that any dependencies are the responsibility of the user
 - Refresh – Refreshes the line browser by updating the data and the SMPUSH record, but does not rebuild the list
 - History – Shows history for the currently selected API Name (determined from Ult-P Name)
- 5 Click **Done** to exit the screen.

After the initial data load, FACTS sends BOD updates when users change certain data or when certain transactions occur in FACTS.

For a list of the events that generate BODs, see “Business events that generate outbound BODs” on page 44.

Verifying the ION configuration

Verify that the connections are set up correctly in FACTS.

- 1 Verify configuration of needed FACTS data. Refer to menu options on the System Management> Infor OS Menu.
- 2 In System Control F/M, background processes must be enabled.
- 3 In Company Control F/M, the Infor OS check box must be checked for each company.
- 4 In the Background Scheduler Dashboard, processes for I1 and I2 must be run or running.
- 5 In Infor OS Management F/M, relevant configuration must be specified and vetted.

Verifying that BODs are generated

- 1 Determine what user actions generate certain BODs. See “Business events that generate outbound BODs” on page 44.
- 2 Perform an action to generate a custom FACTS outbound BOD.
- 3 In Background Process Log Viewer verify process of generating an outbound BOD is successful.
 - If the generation of outbound BODs is not successful, this must be resolved.
- 4 In ION Desk, Connect, verify a data flow for a connection point able to receive the outbound BOD is active.
- 5 If surfacing information via Infor OS CE Homepages, verify Monitor(s) and/or Workflow(s) responsible for surfacing Alert List and/or Task List widget information is/are active.
- 6 In ION Desk, review the messages by using ION Desk OneView or other ION Desk functions.
 - If messages are not displayed in ION Desk OneView, check to see if the BODs were generated but were not retrieved by ION. For inbox/outbox the BODs may still be in the sequel databased outbox, and for REST/API IMS, the BODs may still be in FACTS files SMXOUH/SMXOUL.
- 7 If messages are not flowing, review the XML data for the BOD.

Verifying that ION receives data

To verify that ION is receiving BODs from Distribution FACTS, perform these actions in Infor ION Desk:

- Select **Manage > Connect > Active Connection Points** to show the message queue counts.
- Select **Manage > OneView** to show individual messages, if they are enabled.
- Select **Manage > Connect > Error BODs** to see if any errors were reported.

If you encounter problems, see “Data is not flowing properly” on page **Error! Bookmark not defined..**

Verifying the data flow between applications

After you create and activate data flows to other applications, check the receiving application to ensure that data is flowing between the applications. For example, in a BOD-based integration, check the message inbox area of the application.

ION messages

This table shows the types of ION messages:

| Type | Description |
|-------|---|
| Alert | Alerts for FACTS are generated by Event Management Monitors in Infor OS CE. |
| Task | Tasks are generated by Workflows in Infor OS CE. Tasks are optional for FACTS. A task is an activity that must be completed within a defined period of time. When the task is generated by Workflow, it suspends the execution of the data flow until the work flow task is completed. When a work flow task is completed, the user's response is sent back to resume the execution of the data flow. |

Chapter 7 Verifying homepages for your application

Homepages are a flexible and configurable way to present information and activities to users. Administrators can build pages for various groups of users, roles, departments, or business functions. You can select from the library of available Infor widgets or build your own widgets.

The Alert List Widget and optionally the Task List Widget can be used for FACTS. No product-specific configuration is required to set up homepages with FACTS in Infor OS.

The display widgets can be used for any created Monitors or Workflows. In the Homepages application, create a new page and add the desired widgets.

For example:

- 1 Select **New Page** from the action menu.
- 2 Specify a Name in the **Title** field.
- 3 Specify a description in the **Description** field.
- 4 Click **Create**. You can start adding widgets on your “new” home page.
- 5 Click **Save**.

For Homepages administration tasks, see the *Infor Operating Service Administration Guide*.

Appendix A Troubleshooting

This section describes actions that you can perform to solve Infor OS integration issues.

Data is not flowing properly

Cause: A problem is preventing the flow of BOD data to ION.

Solution: After you complete the configuration setup, if BOD data is not flowing to ION, use the FACTS Background Process Viewer to identify and resolve the problem.

If BOD data is flowing Infor OS CE use OneView to identify and resolve the problem.

ION OneView can be found in ION Desk. You can perform these actions in ION OneView:

- Track business documents from a single consolidated view; search for documents using different search criteria.
- View all ION components that were triggered by the inbound document: Connection Points; data flow filters and content-based routing; mappings; ION engines for example, Monitor, Workflow, and Pulse; monitors; activation policies and workflows.
- View more details about these ION components:
 - Detailed properties for each ION component
 - List of events that were logged by each ION component while processing the message
 - Drilldown views that are used to display the appropriate management pages for the selected ION component
 - Visibility and correlation of the different messages sent or generated:
 - Original BOD messages that triggered the whole list of components displayed; Confirm BOD messages that were generated due to any error while processing the Original BOD message. Mapped/Updated BOD messages that were created during the processing of the Original BOD message
 - View content of BOD messages. This information is only available to authorized users, based on the roles and permissions that are configured.

For more information, see the section on ION OneView in the *ION Desk User Guide*.

To avoid business discrepancies between this application and integrated applications, correct any errors as soon possible.

Appendix B Business events that generate custom FACTS BODs

This table shows the events, which are user actions in Distribution FACTS that generate a custom outbound BOD from Distribution FACTS:

| Verb | Custom FACTS BOD Noun | User action to generate the BOD |
|---------|-----------------------|--|
| Sync | FACTSAPTermsCode | Create or Edit AP Terms Code (APTCDS) |
| Sync | FACTSARTermsCode | Create or Edit AR Terms Code (ARTCDS) |
| Sync | FACTSBranch | Create or Edit Branch (SMBRCH) |
| Sync | FACSTBuyer | Create or Edit Buyer (POBYCD) |
| Sync | FACTSComp | Create or Edit Company (SMCMPY) |
| Sync | FACTSCust | Create or Edit Customer (ARCUST) |
| Sync | FACTSCustClass | Create or Edit Customer Class (ARCCLS) |
| Sync | FACTSCustPriceClass | Create or Edit Customer Price Class (ARCPRC) |
| Sync | FACTSInvDoc | Create Past Sales Doc (SOPINH) |
| Sync | FACTSItem | Create or Edit Item (ICMAST) |
| Sync | FACTSItemClass | Create or Edit Item Class (ICICLS) |
| Sync | FACTSItemPriceClass | Create or Edit Item Price Class (ICPRCS) |
| Process | FACTSOrderLoad | Create inbound FACTS Sales Order (SORSOH) |
| Sync | FACTSQuoteDoc | Create or Edit Quote (SOQSOH) |
| Process | FACTSQuoteLoad | Create inbound FACTS Quote (SOQSOH) |
| Sync | FACTSRaisedAlert | Subscribed Alert Raised (SMALRT) |
| Sync | FACTSRcvblTrx | Create or Edit AR Open Docs (AROPEN) |
| Sync | FACTSShipTo | Create or Edit AR Ship To (ARSHIP) |
| Sync | FACTSShipVia | Create or Edit Warehouse Ship Via (SOSVIA) |

| Verb | Custom FACTS BOD Noun | User action to generate the BOD |
|------|-----------------------|---|
| Sync | FACTSSlsp | Create or Edit Salesperson/Territory (ARSLSP) |
| Sync | FACTSSODoc | Create or Edit Sales Order (SORSOH) |
| Sync | FACTSTaxCode | Create or Edit Tax Tables (ARTAXT) |
| Sync | FACTSVend | Create or Edit Vendor (APVEND) |
| Sync | FACTSVendClass | Create or Edit Vendor Class (APVCLS) |
| Sync | FACTSWhse | Create or Edit Warehouse (ICWHCD) |

Appendix C Mapping Outbound BODs

This table shows the custom FACTS outbound BODs and the equivalent standard BOD for mapping to in the ION Desk>Connect>Mappings:Sync (outbound).

| Custom FACTS BOD Noun | Map to Standard BOD |
|-----------------------|----------------------------------|
| FACTSAPTermsCode | Sync.CodeDefinition |
| FACTSARTermsCode | Sync.CodeDefinition |
| FACTSBranch | Sync.CodeDefinition |
| FACSTBuyer | Sync.Person |
| FACTSComp | Sync.AccountingEntity |
| FACTSCust | Sync.CustomerPartyMaster |
| FACTSCustClass | Sync.CodeDefinition |
| FACTSCustPriceClass | Sync.CodeDefinition |
| FACTSInvDoc | Sync.Invoice |
| FACTSItem | Sync.ItemMaster |
| FACTSItemClass | Sync.CodeDefinition |
| FACTSItemPriceClass | Sync.CodeDefinition |
| FACTSQuoteDoc | Sync.Quote |
| FACTSRaisedAlert | NA (used solely by ION Messages) |
| FACTSRcvblTrx | Sync.ReceivableTransaction |
| FACTSShipTo | Sync.ShipToPartyMaster |
| FACTSShipVia | Sync.CodeDefinition |
| FACTSSlsp | Sync.Person |
| FACTSSODoc | Sync.SalesOrder |
| FACTSTaxCode | Sync.CodeDefinition |
| FACTSVend | Sync.SupplierPartyMaster |
| FACTSVendClass | Sync.CodeDefinition |

| Custom FACTS BOD Noun | Map to Standard BOD |
|---------------------------|-----------------------------|
| FACTSWhse | Sync.Location |
| AcknowledgeFACTSOrderLoad | Acknowledge.FACTSOrderLoad* |
| AcknowledgeFACTSQuoteLoad | Acknowledge.FACTSQuoteLoad* |
| ConfirmFACTSOrderLoad | Confirm.BOD* |
| ConfirmFACTSQuoteLoad | Confirm.BOD* |

*Acknowledge and Confirm BODs are not expected at this FACTS release.

Appendix D Mapping inbound BODs

This table shows the custom FACTS BOD inbound and its equivalent standard BOD for mapping from in the ION Desk>Connect>Mappings:Sync (inbound).

| Process (inbound) | |
|-----------------------|-----------------------|
| Map from Standard BOD | Custom FACTS BOD Noun |
| Process.SalesOrder | FACTSOrderLoad |
| Process.Quote | FACTSQuoteLoad |

At this time there are no incoming Acknowledge or Confirm BODs that FACTS can receive.