



Infor WMS Operational Reporting and Live Access Dashboards with Birst Administration Guide - Cloud Edition

Copyright © 2020 Infor

Important Notices

The material contained in this publication (including any supplementary information) constitutes and contains confidential and proprietary information of Infor.

By gaining access to the attached, you acknowledge and agree that the material (including any modification, translation or adaptation of the material) and all copyright, trade secrets and all other right, title and interest therein, are the sole property of Infor and that you shall not gain right, title or interest in the material (including any modification, translation or adaptation of the material) by virtue of your review thereof other than the non-exclusive right to use the material solely in connection with and the furtherance of your license and use of software made available to your company from Infor pursuant to a separate agreement, the terms of which separate agreement shall govern your use of this material and all supplemental related materials ("Purpose").

In addition, by accessing the enclosed material, you acknowledge and agree that you are required to maintain such material in strict confidence and that your use of such material is limited to the Purpose described above. Although Infor has taken due care to ensure that the material included in this publication is accurate and complete, Infor cannot warrant that the information contained in this publication is complete, does not contain typographical or other errors, or will meet your specific requirements. As such, Infor does not assume and hereby disclaims all liability, consequential or otherwise, for any loss or damage to any person or entity which is caused by or relates to errors or omissions in this publication (including any supplementary information), whether such errors or omissions result from negligence, accident or any other cause.

Without limitation, U.S. export control laws and other applicable export and import laws govern your use of this material and you will neither export or re-export, directly or indirectly, this material nor any related materials or supplemental information in violation of such laws, or use such materials for any purpose prohibited by such laws.

Trademark Acknowledgements

The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All rights reserved. All other company, product, trade or service names referenced may be registered trademarks or trademarks of their respective owners.

Publication Information

Release: Infor WMS Operational Reporting and Live Access Dashboards with Birst Release level 11.3.2

Publication date: October 5, 2020

Contents

About this guide	5
Intended audience.....	5
Related documents	5
Contacting Infor.....	5
Chapter 1 Infor WMS Operational Reporting and Live Access Dashboards with Birst overview 6	
Components.....	6
Understanding content space classes.....	7
Model spaces.....	7
Consumer spaces	7
Customer spaces	7
Infor WMS Operational Reporting and Live Access Dashboards with Birst spaces	8
Understanding space topology.....	8
Understanding integration with Birst.....	9
Chapter 2 Subject areas	11
Chapter 3 Managing users and security	13
Setting up users	13
Creating a new group or adding users to a group	15
Chapter 4 Managing multiple tenants	17
Chapter 5 Extending content	18
Extending consumer spaces	18
Catalog	18
Creating a new custom catalog folder.....	18
Dashboard collections.....	19
Dashboards.....	19
Dashboard filters.....	19

Designer reports	19
Visualizer reports	20
Saved expressions.....	20
Variables	24
Custom Subject Areas	28
Drill maps.....	28
Custom groups.....	28
Custom sets.....	29
Global filters	29
Aggregates.....	29
Packages	29
Extending model spaces	29
Chapter 6 Updating Infor WMS Operational Reporting and Live Access Dashboards for Birst content	30

About this guide

This guide contains conceptual information on basic and advanced features of Infor WMS Operational Reporting and Live Access Dashboards with Birst content. This guide describes the components of the Infor WMS Operational Reporting and Live Access Dashboards with Birst, and how to configure and administer these components for your organization.

Intended audience

This guide is for administrators, business consultants, system engineers, and super users who maintain and configure Infor WMS Operational Reporting and Live Access Dashboards with Birst to monitor the performance of their business.

This is also intended for IT professionals, technical and system analysts, and programmers who support Infor WMS Operational Reporting and Live Access Dashboards with Birst.

Related documents

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor" on page 5.

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal.

If we update this document after the product release, we will post the new version on this website. We recommend that you check this website periodically for updated documentation.

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

Chapter 1 Infor WMS Operational Reporting and Live Access Dashboards with Birst overview

Infor WMS Operational Reporting and Live Access Dashboards with Birst deliver a set of robust operational reports and Key Performance Indicators (KPIs) dashboards over the warehouse management, labor, and billing functional areas in Infor WMS. The operational reports and dashboards content are run from the Infor WMS reports menu using the metadata model and report definitions in Birst.

Components

Components include:

- Warehouse Management Reports
- Labor Reports
- Billing Reports
- Warehouse Management KPIs
- Labor KPIs
- Billing KPIs

Infor WMS Operational Reporting and Live Access Dashboards with Birst include a set of functional area model spaces and a set of corresponding consumer spaces. The model spaces contain the data sources and join relationships from the Infor WMS database. The consumer spaces hold the dashboards, report catalogs, and the custom subject areas that are used for creating reports.

The reports and dashboards are run from the Infor WMS application in Infor Ming.le using a Birst live access connection to provide real-time operational reports and KPIs. Infor WMS Operational Reporting and Live Access Dashboards with Birst are offered as a multi-tenant cloud configuration.

Understanding content space classes

Content space classes are the space classes for Infor-delivered content for Birst. Each tenant is provisioned with at least two spaces, a model space and the corresponding consumer space. These content application space classes are available for each tenant:

- Data model spaces
- Consumer spaces
- Extension or customization spaces:
 - Customer spaces (Birst Enterprise license required)

Model spaces

Model spaces contain the raw data sources coming from the Infor WMS application database. As new versions of the content are released by Infor, these spaces are updated.

The model spaces also contain the required joins, calculations, opaque views, compound tables, and reporting packages.

Consumer spaces

Consumer spaces contain reporting content; for example, reports, visualizations, dashboards, packages, and custom subject areas. Consumer spaces do not contain any data but use the data from one or more model spaces available from the model reporting package.

When new versions of content are delivered by Infor, the consumer spaces are updated by replacing the Infor-created content.

See Extending content on page 18 for information on customizing content.

Customer spaces

With Birst Enterprise, you can load your own data that can be integrated into the Infor-provided content with some limitations. If additional fact tables are needed, you can create your own source and/or model spaces.

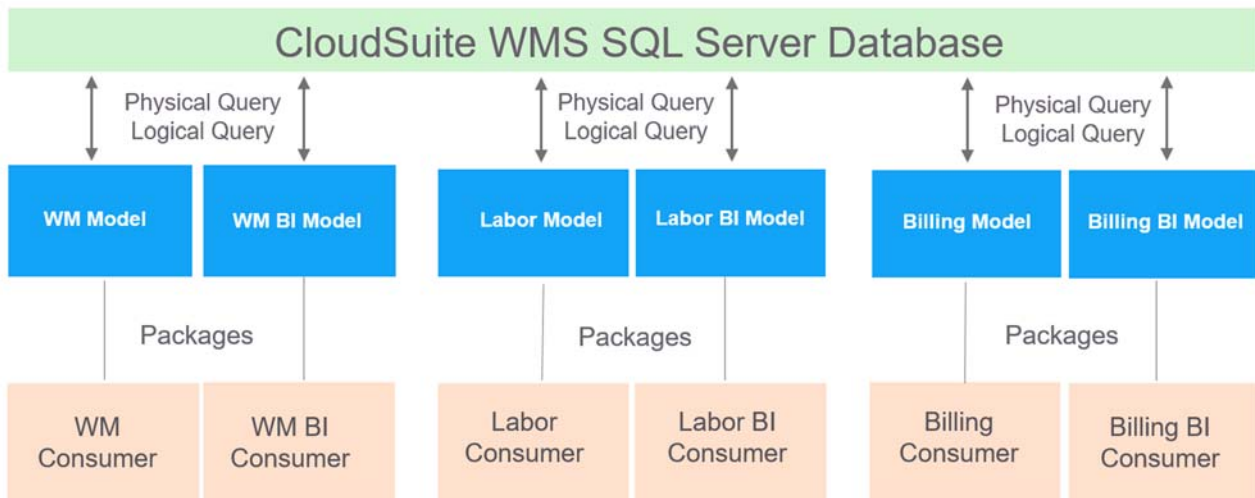
See Extending content on page 18 for information on customizing content.

Infor WMS Operational Reporting and Live Access Dashboards with Birst spaces

Model Space	Reporting Space	Content Description
SCE-WM-Model	SCE-WM-Consumer	Warehouse Management Operational Reports
SCE-Labor-Model	SCE-Labor-Consumer	Labor Operational Reports
SCE-Billing-Model	SCE-Billing-Consumer	Billing Operational Reports
SCE-WM-BI-Model	SCE-WM-BI-Consumer	Warehouse Management KPI Dashboards
SCE-Labor-BI-Model	SCE-Labor-BI-Consumer	Labor KPI Dashboards
SCE-Billing-BI-Model	SCE-Billing-BI-Consumer	Billing KPI Dashboards

Understanding space topology

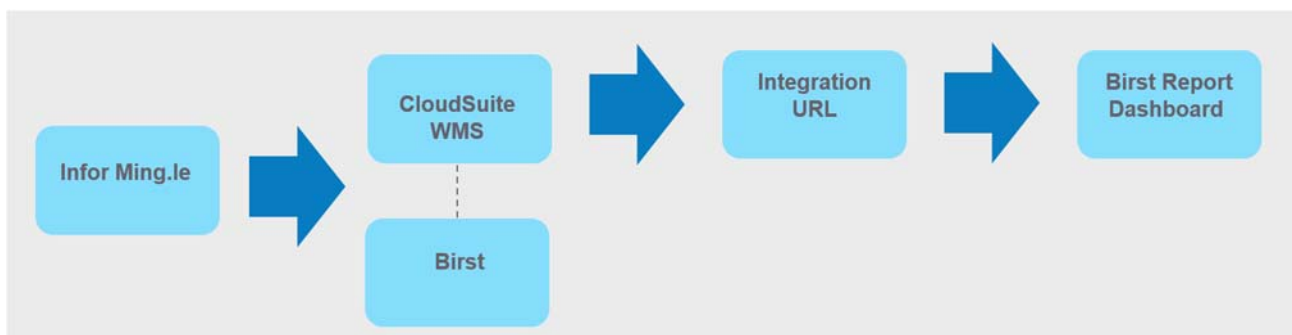
This diagram provides examples of space structure using the Infor WMS Operational Reporting and Live Access Dashboards with Birst database.



Each Birst model space has a Birst consumer space. The metadata model that is mapped to the tables and columns in the Infor WMS database is contained in the model space along with the join relationships between the tables. A reporting package has been created over the model space and imported into the consumer space to make the metadata available to the reporting users. The consumer space also contains the custom subject areas and report catalog used for all of the operational reports and live access dashboards, and for ad-hoc reporting.

Understanding integration with Birst

Operational reports and live access KPI dashboards in Infor WMS are run from the Infor WMS reports menu using URL integration with Birst.



When running reports, users are presented with a prompt page that provides the report parameters. When users run one of the KPI dashboards, the parameter selections are embedded on the Birst dashboard instead of a prompt page.

Users can customize the operational reports and live access KPI dashboards in Birst and add the customized content to the Infor WMS reports menu.

See the *Infor WMS Administration Guide* for information on adding custom reports.

In both the reports and dashboards, a URL is generated that passes this information to Birst:

- SAML SSO to authenticate the user
- Location of report dashboard in Birst catalog
- WMS Session variables
 - Schema name
 - User ID
 - User time zone offset
- Report parameters to filter report data

Reports and dashboards are generated in HTML. The user can select to export as PDF, PPT, CSV, or Excel.

Infor WMS also provides automated report printing for these operational reports:

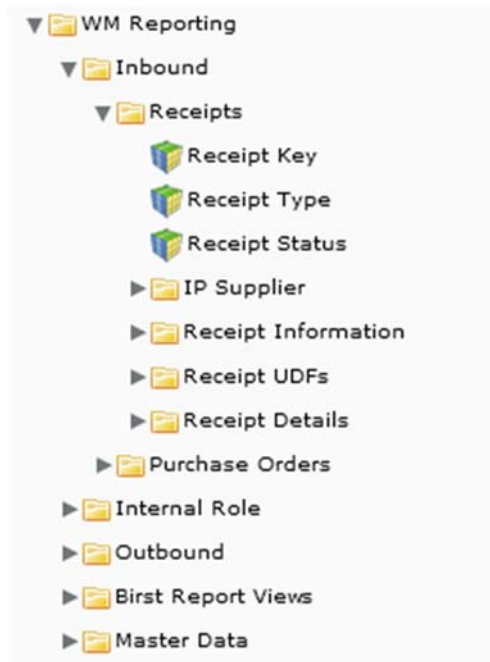
- Pick List
- Packing List
- Receipt Summary
- Receipt Detail
- Bill of Lading
- Master Bill of Lading
- Custom Shipment
- Custom Receipt

Automated report printing authenticates the user and passes the same session variables and report parameters using Birst web services instead of a URL. The web service call prepares the report in PDF format and automatically prints the report to an email addressable printer.

Chapter 2 Subject areas

A subject area is a listing of all attributes and measures in the consumer space. Each of the Infor WMS functional area reporting and BI consumer spaces includes a custom subject area.

Each custom subject area contains the user-friendly database column names organized in folder structures to deliver the ad-hoc end-user experience.



A space administrator can modify the custom subject area or create additional custom subject areas. Security can also be defined for each custom subject area using Birst groups.

Infor WMS Operational Reporting with Birst has three custom subject areas:

- WM Reporting Subject Area
- Labor Module Reporting Subject Area
- Billing Module Reporting Subject Area

The WM reporting Subject Area is shared with the SCE-WM-Consumer space and the SCE-WM-BI-Consumer space.

The Labor Module Reporting Subject Area is shared with the SCE-Labor-Consumer space and the SCE Labor-BI-Consumer space.

The Billing Module Reporting Subject Area is shared with the SCE-Billing-Consumer space and the SCE-Billing-BI-Consumer space.

Chapter 3 Managing users and security

The Infor WMS application is accessible from Infor Ming.le. When the Infor WMS application is launched, the list of operational reports and live access dashboards that are available on the reports menu is based on the Infor Ming.le user. Birst provides additional types of application security and user access features that are defined in the Birst application.

- **User groups**
Ability to create multiple groups with varying rights and privileges. Users are then assigned to these groups.
- **Data-level security through owner locking model security filters**
Ability to restrict access to specific sets of data based on the owner locking defined in Infor WMS using filters at the Birst model level.
- **Subject Area Access through Custom Subject Areas**
Ability to craft customized views of attribute columns and measures. This feature is particularly useful in making the application more accessible to business users and restricting access to certain data elements.

See the *Infor Xi Platform Administration Guide* for information on authorizing users to Infor Ming.le.

To manage access to custom subject areas, see “Creating a Custom Subject Area” in Birst’s online help.

Setting up users

Basic access is granted to users through these Infor Ming.le security groups:

Security group	Use
SCE-BIRST-Model-Administrator	Model administrator with full admin rights to the model spaces
SCE-BIRST-Consumer-Administrator	Consumer administrator with full admin rights to the consumer spaces
SCE-WMBIRST-User	Warehouse Management Consumer with no admin rights

Security group	Use
SCE-BILLINGBIRST-User	Billing Consumer with no admin rights
SCE-LABORBIRST-User	Labor Consumer with no admin rights

Infor WMS Operational Reporting and Live Access Dashboards with Birst have assigned the Infor Ming.le security groups to the Birst spaces to control accessibility to the Birst studios and capabilities within the studios.

Space	Security Group	Role
SCE-WM-Model	SCE-BIRST-Model-Administrator	Reporting package access
SCE-WM-BI-Model		With proper licensing, ability to customize the metadata model
SCE-Labor-Model		
SCE-Labor-BI-Model		
SCE-Billing-Model		
SCE-Billing-BI-Model		
SCE-WM-Consumer	SCE-BIRST-Model-Administrator	Ability to import new reporting packages
SCE-WM-BI-Consumer		Access to default subject area
SCE-Labor-Consumer		Ability to create users and user groups
SCE-Labor-BI-Consumer		Ability to create custom reports directory
SCE-Billing-Consumer		Access to reporting studios for modifying and creating new reports and dashboards
SCE-Billing-BI-Consumer		
SCE-WM-Consumer	SCE-BIRST-Consumer-Administrator	Ability to modify and create custom subject areas
SCE-WM-BI-Consumer		Ability to create users and user groups
SCE-Labor-Consumer		Ability to create custom reports directory
SCE-Labor-BI-Consumer		Access to reporting studios for modifying and creating new reports and dashboards
SCE-Billing-Consumer		
SCE-Billing-BI-Consumer		

Space	Security Group	Role
SCE-WM-Consumer SCE-WM-BI-Consumer	SCE-WMBIRST-User	Access to reporting studios for modifying and creating new reports and dashboards
SCE-Labor-Consumer SCE-Labor-BI-Consumer	SCE-LABORBIRST-User	Access to reporting studios for modifying and creating new reports and dashboards
SCE-Billing-Consumer SCE-Billing-BI-Consumer	SCE-BILLINGBIRST-User	Access to reporting studios for modifying and creating new reports and dashboards

Additional user groups can be set up in Birst to further grant or restrict access to the consumer spaces. You must be a member of the Model Administrator or Consumer Administrator security group to create new groups.

Creating a new group or adding users to a group

To create a new group or add users to a group:

- 1 Select a Birst space and select **Admin**.
- 2 On the **Manage Access** tab, click **Manage Groups**.
- 3 To create a new group, click **New** next to the Select Group field.
A new group is added to the Select Group list using this naming convention: Group 0, Group 1, Group 2.
- 4 In the **Group Name** field, select the new group or the group to be edited.
- 5 Optionally, you can change the name of the group in the **Group Name** field.
- 6 Assign permissions to the group. All members of the group will have the same permissions.

These permissions are available:

- **Designer Access**
Permission to access Designer and create reports. If this box is selected, users in the group see Designer as one of the choices on the right side of the home page after logging in.
- **Visualizer Access**
Permission to access Visualizer and create reports. If this box is selected, users in the group see Visualizer as one of the choices on the right side of the home page after logging in.
- **Edit Dashboard**

Permission to create and edit dashboards in the original Dashboards and new Dashboards 2.0 modules.

- **Enable Download**

Permission to export reports to a file such as a comma-separated value (.csv) or Excel (.xls) file. You can download from Designer and the original Dashboards and new Dashboards 2.0 modules. The type of export file available depends upon the report.

- **Enable Self-Schedule**

Permission to schedule report delivery from Designer, and the original Dashboards and new Dashboards 2.0 modules.

- **Modify Saved Expression**

Permission to create and modify saved expressions in Designer. In Visualizer, you must have this permission to make an expression global.

- **Edit Report Catalog**

In Designer only, permission to modify files and folders in each user's Private folder and the Shared folder only. Users can right click on the report or folder title in the Open Report dialog. To add, modify, or delete contents within the Shared folder, the user's group must also have write permission on the Shared folder or its subfolder.

- **Dashboard Visualizer Exploration**

Permission to access Visualizer from Dashboards 2.0. For members of this group, the **Explore in Visualizer** button appears in the dashlet menu area.

7 Assign members of the space to the group by selecting **Member** next to the user's name. Users can be included in one or more groups.

8 Click **Update Group Details** at the bottom of the page to save the changes.

To delete a group, select the group in the list and click **Delete**.

See "Creating Groups and Adding Users to Groups" in Birst's online help for additional instructions on setting up a group and adding existing users to that group.

Chapter 4 Managing multiple tenants

Infor provides at least two tenants. You can use one tenant to test any customizations before applying them to your production environment. For each Infor tenant, you should have a corresponding Birst account and set of spaces. In the default setup, users and spaces are separate with separate workflows to load and process the data.

If you want to use a non-production tenant to test Birst customizations and then move the customizations to production, grant access to your test tenant spaces to a production Birst user. Go to the Birst Command Window and use the `addusertospace` command. See Birst online help for details on using this command.

After a production user has access to your test tenant spaces, use the **Compare and Merge** screen or the `copyspace` command to copy the modified content from your test spaces to the production spaces. See Birst online help for additional information.

Chapter 5 Extending content

Caution: With the appropriate Birst license, you can copy and customize an Infor-provided space. Note, though, that Infor does not recommend this approach.

After a copy is made, subsequent updates that are published by Infor will not be updated to your copied spaces. The original spaces are updated but the copies are not updated. You are responsible for manually migrating any changes into your copied spaces. Data loads for copied source and model spaces can break due to changes in the underlying data structures.

Infor recommends that you follow the guidelines specified in this section and do not make a copy of your spaces. This is a safer approach to making any needed customizations.

Extending consumer spaces

This section describes what you can customize in the consumer spaces.

Catalog

Infor WMS Operational Reporting and Live Access Dashboards with Birst are saved in an Infor-provided catalog folder called Infor Reporting SCE in each of the operational reports and live access dashboards consumer spaces.

Do not create new reports and dashboards, or copy new reports and dashboards into these folders. Infor-provided folders and their associated sub-folders could be overwritten in a future update.

To create new reports and dashboards in Birst, you must create a custom catalog folder outside of the catalog folder structure provided by Infor. This action prevents the custom reporting content from being overwritten in a future update.

Creating a new custom catalog folder

You must be a member of the Consumer Administrator security group to modify the report catalog.

To create a new custom catalog folder:

- 1 Select a Birst consumer space and select **Admin**.
- 2 On the **Manage Access** tab, click **Manage Report Catalog**.
- 3 To create a new custom catalog folder, right click on **shared** in the catalog directory pane and select Add folder.
- 4 Specify a new folder name; for example 'My Custom Reports.
- 5 Click **Create**.

All modified or new reports must be saved in this new folder.

Dashboard collections

Do not modify Infor-provided dashboard collections. Create new collections for copies of Infor-provided dashboards and newly created dashboards in your custom catalog folder.

Dashboards

Do not modify any dashboards in an Infor-provided collection. To make modifications to a dashboard, copy the dashboard and save it to your custom folder.

Note: When you copy a dashboard, the reports and filters used by the dashboard are not copied. If you must make changes to the underlying reports or filters, copy the reports and filters separately. Configure the new dashboard to use the copied reports and filters.

This approach provides flexibility to copy what is needed. For example, to add an additional filter to a report on your dashboard, copy the dashboard into your own collection and add the additional filter. Your dashboard can continue to use the Infor-provided report and the data driven filter will be applied to that report. Any future updates will be applied to the Infor-delivered report.

Dashboard filters

You can create your own dashboard filters and use them on your custom dashboards. Do not modify Infor-provided filters. Additionally, do not use your filters on an Infor-provided dashboard. You can use Infor filters on your dashboards if you leave them unchanged.

Designer reports

Do not modify Infor-provided Designer reports. Make a copy of the report in your custom folder and edit the copy. Future updates to the Infor-provided reports must be manually merged into the copy of the report.

If you copy a report that contains sub-reports, the sub-reports are not copied. Copy the sub-reports and save them to your custom folder.

Note: Because you must not edit Infor-provided dashboards, copy the dashboard when you copy a report. Change the link on your new dashboard to the new copy of the report.

Visualizer reports

Do not modify Infor-provided Visualizer reports. Make a copy of the report in your custom folder and edit the copy. Future updates to the Infor-provided reports must be manually merged into the copy of the report.

Note: Because you must not edit Infor-provided dashboards, copy the dashboard when you copy a report. Change the link on your new dashboard to the new copy of the report.

Saved expressions

You can create saved expressions for use in custom reports. If you create saved expressions, save them to a Custom Subject Area that you have created.

Infor-provided saved expressions include:

Consumer Space	Saved Expression	Definition
SCE-WM-Consumer	Positive Adjustment by Lot	IIF([CCADJRULES.POSADJLOT]='0', 'No', IIF([CCADJRULES.POSADJLOT]='1','Yes', VARCHAR([CCADJRULES.POSADJLOT])))
SCE-WM-Consumer	BOLLSurrogateKey	[vBOLbyLoadOrder.BillOfLadingNumber]+'_'+[vBOLbyLoadOrder.ShipFromName]+'_'+[vBOLbyLoadOrder.ShipToName]
SCE-WM-Consumer	Fully Filled or Not	IIF([Sum:ORDERDETAIL_ORIGINALQTY]=[Sum:ORDERDETAIL_SHIPPEDQTY], 'Filled In Full', 'Not Filled In Full')
SCE-Labor-Consumer	DateFilterLCPH	/*GetPromptValue('TimeInterval','YEARS')*/(DATEADD(<EVAL!

		<p>IIF(GetPromptValue('TimeInterval')='YEARS','YEAR',</p> <p>IIF(GetPromptValue('TimeInterval')='MONTHS','MONTH',</p> <p>IIF(GetPromptValue('TimeInterval')='WEEKS','WEEK','DAY'))!>,-10, NOWDATE))</p>
SCE-Labor-Consumer	AllowedNormalHours	<p>([Sum: LM_LABORAUDIT_ADDALLOWANCE TIME]+[Sum: LM_LABORAUDIT_ADDNORMALTIME])/60)</p>
SCE-Labor-Consumer	Effectiveness	<p>IIF(SavedExpression('ShiftTime')<>0,(SavedExpression('DirectOffStandard')+SavedExpression('ProRatedStandard'))/SavedExpression('ShiftTime'),0)</p>
SCE-Labor-Consumer	DirectOffStandard	<p>stat(sum,0,select</p>
SCE-Labor-BI-Consumer		<p>IIF([VTIMESHEETDETAIL.STARTTIME] IS NULL ,null,datediff(second,</p> <p>IIF[VTIMESHEETDETAIL.STARTTIME] <datetime(SavedExpression('EffectiveFromDate')),datetime(SavedExpression('EffectiveFromDate'))],[VTIMESHEETDETAIL.STARTTIME]),</p> <p>IIF(([VTIMESHEETDETAIL.ENDTIME] IS NULL OR [VTIMESHEETDETAIL.ENDTIME] > datetime(SavedExpression('EffectiveToDate')),datetime(SavedExpression('EffectiveToDate'))],[VTIMESHEETDETAIL.ENDTIME])) from [ALL] where [VTIMESHEETDETAIL.STATUS] = 9 AND[VTIMESHEETDETAIL.ACTIVITYTYPE] = 2 AND (([VTIMESHEETDETAIL.ENDTIME] <= datetime(SavedExpression('EffectiveToDate')) AND[VTIMESHEETDETAIL.ENDTIME] >datetime(SavedExpression('EffectiveFromDate'))))or ([VTIMESHEETDETAIL.STARTTIME] < datetime(SavedExpression('EffectiveTo</p>

		<pre> Date')) AND [VTIMESHEETDETAIL.STARTTIME] >=datetime(SavedExpression('Effective FromDate'))or ([VTIMESHEETDETAIL.STARTTIME] < datetime(SavedExpression('EffectiveFr omDate')) AND [VTIMESHEETDETAIL.ENDTIME] >= datetime(SavedExpression('EffectiveTo Date')))) AND([VTIMESHEETDETAIL.STANDAR DATTR]=0 OR [VTIMESHEETDETAIL.STANDARDAT TR] IS NULL)) </pre>
SCE-Labor-Consumer SCE-Labor-BI-Consumer	EffectiveFromDate	<pre> DateAdd(Day,(- 1*(Integer(GetPromptValue('DaysHistor y','800'))),DateTime(GetPromptValue('Date',varc har(NOW)))) </pre>
SCE-Labor-Consumer SCE-Labor-BI-Consumer	EffectiveToDate	<pre> GetPromptValue('Date',varchar(NOW)) </pre>
SCE-Labor-Consumer SCE-:Labor-BI-Consumer	Shift Time	<pre> stat(sum,0,select IIF([VTIMESHEETHEADER.DATETIME IN_DATETIME] IS NULL OR [VTIMESHEETHEADER.DATETIMEOU T_DATETIME] IS NULL ,null,datediff(second,IIF([VTIMESHEETHEADER.DATETIMEIN_ DATETIME]<datetime(SavedExpressio n('EffectiveFromDate')),datetime(Saved Expression('EffectiveFromDate')) ,[VTIMESHEETHEADER.DATETIMEIN_ _DATETIME]),IIF([VTIMESHEETHEADER.DATETIMEOU T_DATETIME]> datetime(SavedExpression('EffectiveTo Date')),datetime(SavedExpression('Effe ctiveToDate')),[VTIMESHEETHEADER. DATETIMEOUT_DATETIME]))) from [ALL] WHERE ((([VTIMESHEETHEADER.STATUS] = 1 AND[VTIMESHEETHEADER.DATETIM EIN_DATETIME]<datetime(SavedExpre </pre>

```

ssion('EffectiveToDate'))))OR
([VTIMESHEETHEADER.STATUS] IN
('9','11','13','15') AND
[VTIMESHEETHEADER.DATETIMEOU
T_DATETIME]<=datetime(SavedExpres
sion('EffectiveToDate')) AND
[VTIMESHEETHEADER.DATETIMEOU
T_DATETIME]>
datetime(SavedExpression('EffectiveFr
omDate'))))OR([VTIMESHEETHEADER.
STATUS] IN ('9','11','13','15') AND
[VTIMESHEETHEADER.DATETIMEIN_
DATETIME]<datetime(SavedExpressio
n('EffectiveToDate')) AND
[VTIMESHEETHEADER.DATETIMEIN_
DATETIME]>=datetime(SavedExpressi
on('EffectiveFromDate'))))OR
([VTIMESHEETHEADER.STATUS] IN
('9','11','13','15') AND
[VTIMESHEETHEADER.DATETIMEIN_
DATETIME]<datetime(SavedExpressio
n('EffectiveFromDate')) AND
[VTIMESHEETHEADER.DATETIMEOU
T_DATETIME]>=datetime(SavedExpres
sion('EffectiveToDate')))) )

```

SCE-Labor-Consumer	ProRatedStandard	<pre> stat(sum,0,select IIF([VTIMESHEETDETAIL.STARTTIME] IS NULL OR [VTIMESHEETDETAIL.ENDTIME] IS NULL ,null,datediff(second, IF([VTIMESHEETDETAIL.STARTTIME] <datetime(SavedExpression('EffectiveF romDate')),datetime(SavedExpression(' EffectiveFromDate')),[VTIMESHEETDE TAIL.STARTTIME]), IIF([VTIMESHEETDETAIL.ENDTIME] > datetime(SavedExpression('EffectiveTo Date')),datetime(SavedExpression('Effe ctiveToDate')),[VTIMESHEETDETAIL.E NDTIME])))/(([Sum: VTIMESHEETDETAIL_TIMEDIFFINSE CONDS] * 1.0) * number([VTIMESHEETDETAIL.STAND ARDATTR] * 60.0)from [ALL] where </pre>
--------------------	------------------	---

	<pre>[VTIMESHEETDETAIL.STATUS] = 9AND [VTIMESHEETDETAIL.ACTIVITYTYPE]= 2 AND (([VTIMESHEETDETAIL.ENDTIME] <= datetime(SavedExpression('EffectiveTo Date')) AND [[VTIMESHEETDETAIL.ENDTIME] > datetime(SavedExpression('EffectiveFr omDate'))or ([VTIMESHEETDETAIL.STARTTIME] < datetime(SavedExpression('EffectiveTo Date')) AND [VTIMESHEETDETAIL.STARTTIME] >=datetime(SavedExpression('Effective FromDate'))or ([VTIMESHEETDETAIL.STARTTIME] < datetime(SavedExpression('EffectiveFr omDate')) AND [VTIMESHEETDETAIL.ENDTIME] >= datetime(SavedExpression('EffectiveTo Date')))) AND ([VTIMESHEETDETAIL.STANDARDAT TR]>0))</pre>
<p>SCE-Billing-Consumer Top5 Charge Code</p>	<pre>IIF(RANK([Sum: BIC_CHARGE_CHARGE_AMT])>=1 AND RANK([Sum: BIC_CHARGE_CHARGE_AMT])<=5, [BIC_CHARGE.CHARGE_CODE],'Othe rs')IIF(RANK([Sum: BIC_CHARGE_CHARGE_AMT])>=1 AND RANK([Sum: BIC_CHARGE_CHARGE_AMT])<=5, [BIC_CHARGE.CHARGE_CODE],'Othe rs')</pre>

Variables

You can create your own variables. Do not modify any Infor-created variables unless instructed by Infor.

Infor-provided variables include:

Model Space	Variable	Description
SCE-WM-Model SCE-WM-BI-Model SCE-Labor-Model SCE-:Labor-BI-Model SCE-Billing-Model SCE-Billing-BI-Model	p_SCHEMA	Passed in URL integration and web services from Infor WMS. Default value is wmwhse1.
SCE-WM-Model SCE-WM-BI-Model SCE-Labor-Model SCE-:Labor-BI-Model SCE-Billing-Model SCE-Billing-BI-Model	p_uid	Passed in URL integration and web services from Infor WMS. Default value is XXXXXXXXXXXX.
SCE-WM-Model SCE-WM-BI-Model SCE-Labor-Model SCE-:Labor-BI-Model SCE-Billing-Model SCE-Billing-BI-Model	InforEnvironment	PRD
SCE-WM-Model SCE-WM-BI-Model SCE-Labor-Model SCE-:Labor-BI-Model SCE-Billing-Model SCE-Billing-BI-Model	InforTenant	SELECT TOUPPER (SUBSTRING('V{USER}',0, POSITION('_', 'V{USER}',0)+4)) FROM [ALL]

Model Space	Variable	Description
SCE-WM-Model	InforCustomer	SELECT TOUPPER (SUBSTRING('V{USER}',0, POSITION('_', 'V{USER}',0)+4)) FROM [ALL]
SCE-WM-BI-Model		
SCE-Labor-Model		
SCE-:Labor-BI-Model		
SCE-Billing-Model		
SCE-Billing-BI-Model		
SCE-WM-Model	InforImageURL	https://s3.amazonaws.com/inforcloudsuite-i24- customer- images/V{InforEnvironment}/V{InforCustomer}/
SCE-WM-BI-Model		
SCE-Labor-Model		
SCE-:Labor-BI-Model		
SCE-Billing-Model		
SCE-Billing-BI-Model		
SCE-WM-Model	InforContentVersion	'11.3.1.201902709'
SCE-WM-BI-Model		
SCE-Labor-Model		
SCE-:Labor-BI-Model		
SCE-Billing-Model		
SCE-Billing-BI-Model		
SCE-WM-Model	p_locale	V{UserLocale\$}
SCE-WM-BI-Model		
SCE-Labor-Model		
SCE-:Labor-BI-Model		
SCE-Billing-Model		
SCE-Billing-BI-Model		

Model Space	Variable	Description
SCE-WM-Model SCE-WM-BI-Model SCE-Labor-Model SCE-:Labor-BI-Model SCE-Billing-Model SCE-Billing-BI-Model	DefaultOwner	Select \"+[DEFAULTOWNER.OWNERKEY] +\" from [ALL] WHERE [DEFAULTOWNER.USERID] =GetVariable('p_uid')
SCE-WM--Model SCE-WM-BI-Model SCE-Labor-Model SCE-Labor-BI-Model	p_tzoffset	Passed in URL integration and web services from Infor WMS. Default value is 0.
SCE-WM--Model SCE-WM-BI-Model SCE-Labor-Model SCE-Labor-BI-Model	p_GetLaborCutoff	Select \" + [NSQLCONFIG.NSQLVALUE] + \" from [ALL] where TOUPPER([NSQLCONFIG.CONFIGKEY]) ='LABORRPTTIME'
SCE-WM--Model SCE-WM-BI-Model SCE-Labor-Model SCE-Labor-BI-Model	p_CurrentDate	SELECT [Time.Date] FROM [ALL] WHERE [Time.Date]=NOWDATE
SCE-Billing-Model	p_defaultdbtype	MSS
SCE-Billing-BI-Model	p_CurrentYear	SELECT [Time.Year] FROM [ALL] WHERE [Time.Date] = NOWDATE
SCE-Billing-Model	p_CurrentMonth	SELECT [Time.Month of Year] FROM [ALL] WHERE [Time.Date] = NOWDATE
SCE-Labor-Model SCE-Labor-BI-Model	EmployeeGroupFrom	Passed in URL integration and web services from Infor WMS. Default value is WMWHSE1.
SCE-Labor-Model SCE-Labor-BI-Model	TimeInterval	Passed in URL integration and web services from Infor WMS. Default value is WEEKS.

Model Space	Variable	Description
SCE-Labor-Model SCE-Labor-BI-Model	CacheTime	60000
SCE-Labor-Model SCE-Labor-BI-Model	TaskKeyFrom	Passed in URL integration and web services from Infor WMS. Default value is 0000000000

Custom Subject Areas

Do not modify any Infor-provided custom subject areas. Infor-provided custom subject areas could be replaced by a new version in future releases. Create your own custom subject area.

The Infor-provided custom subject areas include:

Consumer Space	Custom Subject Area
SCE-WM-Consumer	WM Reporting Subject Area
SCE-Labor-Consumer	Labor Module Reporting Subject Area
SCE-Billing-Consumer	Billing Module Reporting Subject Area
SCE-WM-BI-Consumer	WM Reporting Subject Area
SCE-Labor-BI-Consumer	Labor Module Reporting Subject Area
SCE-Billing-BI-Consumer	Billing Module Reporting Subject Area

Drill maps

Drill maps should not be created. Use report level drilling only.

Custom groups

Infor does not supply custom groups. You can create custom groups as needed. Custom groups are not overwritten during updates.

Custom sets

Infor does not supply custom sets. You can create custom sets as needed. Custom sets are not overwritten during updates.

Global filters

Infor does not supply global filters. You can create global filters as needed. Global filters are not overwritten during updates.

Aggregates

Infor-provided aggregates are in a model space and brought into the consumer space with a package. Do not modify Infor-provided aggregates.

With the appropriate Birst license, you can create aggregates in the extension space or a customer-created space. Import a package from a model space and create the aggregate. Create a package with your new aggregate and import that package into the consumer space.

Note: If Infor provides changes to the model spaces, the changes could break any customer-created aggregates. Managing aggregates is an advanced task that requires considerable testing and ongoing monitoring to ensure that the aggregates are built properly.

Packages

Infor-provided packages should not be modified without careful consideration. Modification of packages could affect the report output. Prior to changing Infor-provided packages, Infor recommends conducting extensive testing and performing ongoing monitoring. Packages should not be published from the consumer space. Customer-created packages coming from an extension or customer-managed space can be imported into the consumer space.

Extending model spaces

Do not modify Infor-provided source and model spaces unless directed by Infor. Any modifications to these spaces could be overwritten in a future update.

Chapter 6 Updating Infor WMS Operational Reporting and Live Access Dashboards for Birst content

When Infor provides an update, only the Infor-provided spaces are updated. Spaces that you create, either from scratch or as a copy of the Infor space, are not updated.

Note: If your customer spaces use packages from the Infor spaces, your spaces could be affected by an upgrade.

As new content is developed, Infor updates the spaces. Changes to the content are necessary due to underlying changes to the applications. Applications apply these updates to all tenants during a maintenance window. No action is needed on your part.

You will be notified in advance that an update has been scheduled.