

Systemwalker Service Catalog Manager V15.2.1 (Business Support System)



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About this Manual

This manual provides information on new features and changes made to existing features of Systemwalker Service Catalog Manager V15.2.1 as compared to Systemwalker Service Catalog Manager V15.2. Systemwalker Service Catalog Manager V15.2 is hereafter referred to as Business Support System (BSS) V15.2, and Systemwalker Service Catalog Manager V15.2.1 is hereafter referred to as BSS V15.2.1.

This manual is structured as follows:

Chapter	Description
What's New?	Describes changes and enhancements made in BSS since V15.2.
Update Installation on page 9	Describes information on update installations.
Compatibility	Describes compatibility issues when upgrading to BSS V15.2.1.
Restrictions on page 12	Describes the known restrictions of this BSS release.

Readers of this Manual

This manual is directed to operators who are responsible for installing BSS.

It assumes that you are familiar with the following:

- Administration of the operating systems in use, including the adaption and execution of batch files or shell scripts.
- Java EE technology, particularly as to the deployment on application servers.
- Relational databases and their administration, in particular, the PostgreSQL database.
- · BSS concepts as explained in the Overview manual.
- · Installation and administration of Web servers.
- · Installation and administration of the GlassFish application server.

Notational Conventions

This manual uses the following notational conventions:

Add	The names of graphical user interface elements like menu options are shown in boldface.	
init	System names, for example, command names, and text that is entered from the keyboard are shown in Courier font.	
<variable></variable>	Variables for which values must be entered are enclosed in angle brackets.	
[option]	Optional items, for example, optional command parameters, are enclosed in square brackets.	
one two	Alternative entries are separated by a vertical bar.	
{one two}	Mandatory entries with alternatives are enclosed in curly brackets.	

Available Documentation

The following documentation on BSS is available:

- Overview: A PDF manual introducing BSS. It is written for everybody interested in BSS and does not require any special knowledge.
- Online Help: Online help pages describing how to work with the administration portal of BSS.
 The online help is directed and available to everybody working with the administration portal.
- Installation Guide: A PDF manual describing how to install and uninstall BSS. It is directed to operators who set up and maintain BSS in their environment.
- Operator's Guide: A PDF manual for operators describing how to administrate and maintain BSS.
- Technology Provider's Guide: A PDF manual for technology providers describing how to prepare applications for usage in a SaaS model and how to integrate them with BSS.
- Supplier's Guide: A PDF manual for suppliers describing how to define and manage service offerings for applications that have been integrated with BSS.
- Reseller's Guide: A PDF manual for resellers describing how to prepare, offer, and sell services defined by suppliers.
- Broker's Guide: A PDF manual for brokers describing how to support suppliers in establishing relationships to customers by offering their services on a marketplace.
- *Marketplace Owner's Guide:* A PDF manual for marketplace owners describing how to administrate and customize marketplaces in BSS.
- Developer's Guide: A PDF manual for application developers describing the public Web service interface of BSS and how to use it to integrate applications and external systems with BSS.
- Javadoc documentation for the public Web service interface of BSS and additional resources and utilities for application developers.

1 What's New?

This chapter describes changes and enhancements made in BSS since V15.2.

1.1 System Environment

The installation of BSS requires an upgrade of your system environment to the following software versions:

- Oracle GlassFish application server, version 3.1.2.2 (previously: version 2.1.1)
- PostgreSQL, version 9.1.6 (previously: version 8.4.4.1)
- JDK, version 7. JDK, version 5 is no longer supported.
- Apache Ant, version 1.8 or higher (GlassFish application server 3.1.2.2 no longer includes Apache Ant).

The *Installation Guide* provides detailed information on the steps required for an update installation of BSS.

The following systems are now additionally supported:

- · Windows Server 2012
- Internet Explorer V10.0 running in V8.0 compatibility mode.

Multi-Node Environment

BSS can be operated in a multi-node environment: You can install several BSS domains communicating with one master indexer domain. In this case, a load balancer must be configured for handling and distributing the load on the various nodes. In case you want to set up a multi-node environment, refer to the relevant documentation (application server, load balancer), or contact your Fujitsu support organization.

1.2 Price Calculation Based on Time Units

With this release, the charges for a service can be calculated per time unit as an alternative to pro rata (based on milliseconds, i.e. customers are charged exactly for the time a service was used).

A supplier can now select one of the following calculation options when defining a price model: **Free of charge**, **Pro rata**, or **Per time unit**. **Pro rata** is the default.

In case a supplier selects the per time unit calculation, customers are charged for the full time units during which they use a service. The time unit can be defined as **Hour**, **Day**, **Week**, or **Month**. The start and end of each unit are pre-defined as follows:

Hour: From 00:00.000 to hh:59:59.999.

Day: From 00:00:00.000 to 23:59:59.999.

Week: From Monday, 00:00:00.000, to Sunday, 23:59:59.999.

Month: From the first day of the month, 00:00:00.000 to the last day of the month, 23:59:59.999. For details on the new calculation option, refer to the *Supplier's Guide* and the online help pages of the administration portal.

Customer Billing Data XML File

Existing price models still use the pro rata price calculation by default.

In the customer billing data XML file, the <PriceModel> element has been extended by the optional calculationMode. This attribute can take on the following values: calculationMode="PRO RATA" or calculationMode="PER UNIT". In the latter case, an additional timeZone attribute is added with the value timeZone=<time_zone>, for example "UTC +01:00" for Central Europe.

For details on the XML elements, refer to the Developer's Guide.

1.3 Adaptable Billing Periods

Until BSS V15.2, billing data were processed on a regular, monthly basis. Billing periods started on the 1st day of a month and ended on the last day. The billing run was executed when the billing period had ended. The operator was only able to set an offset for the billing run using the TIMER INTERVAL BILLING OFFSET configuration parameter.

With this release of BSS, suppliers and resellers can individually define the start day for their billing periods. A billing period still lasts always one month.

The billing period for revenue shares is still one calendar month, starting on the first day of the month at 00:00:00.000 and ending on the last day of the month at 23:59:59.999. This is the same behavior as in BSS V15.2.

Billing Runs

BSS now checks for billing-relevant data on a daily basis, and executes a billing run. The billing run checks whether the end of a monthly billing period for a supplier or reseller has been reached, and, if yes, calculates the customer billing data. If the billing run is executed on the last day of a month, revenue share data are calculated in addition.

The billing offset (TIMER_INTERVAL_BILLING_OFFSET) is applied to the daily billing runs as well as to the monthly calculation of revenue shares. The days defined in the offset apply to the monthly calculations; the minutes or hours defined in the offset apply to the daily billing runs.

Reporting

The billing period start and end date and time are displayed in all reports containing billing period information. This applies to the

- Detailed billing report for an existing invoice of a customer for suppliers.
- · Detailed billing report for an existing invoice for customers.
- Payment preview report for customers. This report has been renamed. It was previously
 called Payment preview for the current month until now. This report collects all the charges
 that have not yet been included in a customer billing data result file. Due to the flexible billing
 periods, this report may now also include charges that became due in the previous month.
- Revenue share reports for suppliers, resellers, brokers, and marketplace owners.

Exporting Billing Data

The **Export billing data** menu option now allows resellers or suppliers to export the billing data for one or several customers for a specific time frame. Resellers, brokers, marketplace owners, or suppliers can export the revenue share data for their organization for a specific time frame. The platform operator can export the revenue share data for all organizations with a specific role for a specific time frame.

Customer Billing Data and Revenue Share Data XML File

In the customer billing data XML file, the billing period start and end day and time are output as defined by a supplier or reseller.

In the revenue share data XML file, the clement element has been added within each <Subscription> element.

For details on the XML elements, refer to the Developer's Guide.

1.4 Deprecated Access Types

The platform and proxy access types have been deprecated. The usage of these access types is discouraged since time or data-sensitive applications put a considerable load on BSS and cause a significant resource consumption.

The administration portal no longer allows for the selection of the platform or proxy access type. The access types can still be set in the XML definition file of the respective technical service.

2 Update Installation

Before upgrading an existing BSS installation to this release, you need to be aware of the compatibility issues described in *Compatibility*.

The *Installation Guide* provides detailed step-by-step instructions for upgrading from BSS V15.2 to V15.2.1. If you want to upgrade from a previous release, you need to install V15.2 first.

BSS can be operated on the platforms specified in the *Installation Guide*.

3 Compatibility

This chapter describes compatibility issues when upgrading to BSS V15.2.1.

Update Installation

Upgrading BSS is supported from V15.2 to V15.2.1. If you want to upgrade from a previous release, you need to install V15.2 first.

Public Web Service Interface

If applications integrated with BSS rely on pure HTTP calls, you need to change their setup to use HTTPS.

BSS V15.2.1 uses the public Web service interface of V15.2. It comes with a **compatibility layer** so that applications (clients) implemented with BSS V15.0 or V 15.1 can still be used without having to be rewritten. Versions of the public Web service interface before V15.0 are not supported.

A Web service user accesses exactly one version of the Web service interface. The versioning pattern is as follows:

Web service version	BSS version
V1.2	V15.0
V1.3	V15.1
V1.4	V15.2 and V15.2.1 (this release)

A WSDL URL is used to address a specific Web service. For new Web service users, this is the current version of the Web services (V1.4) with basic or certificate-based authentication (BASIC or CLIENTCERT). In case existing Web service users want to upgrade to the current release, the version information provided in the WSDL URLs used in the application in question must be updated to V1.4.

The WSDL URL of a specific service can be found out as follows:

- In the GlassFish administration console, go to Common Tasks -> Applications -> fujitsu-bss.
- 2. On the **Descriptor** tab, open the META_INF/sun-ejb-jar.xml descriptor file of the fujitsu-adm-um-webservices.jar **subcomponent**.

For every Web service, the endpoint address URI shows the Web service name, its version, and whether it is to be addressed through basic authentication (BASIC) or certificate-based authentication (CLIENTCERT).

The URL pointing to the WSDL definition of a platform service is constructed as follows:

<base URL>/<endpoint-address-uri>?wsdl

where

<base URL> points to the server and port where the BSS Web services have been deployed.
<endpoint-address-uri> is the address as defined in the sun-ejb-jar.xml descriptor file.
?wsdl is the suffix to be used for identifying a WSDL file.

Example: https://myserver:8081/AccountService/v1.4/BASIC?wsdl

The fujitsu-adm-um-webservices-v1_2.jar subcomponent contains the descriptor file for BSS V15.0; the fujitsu-adm-um-webservices-v1_3.jar subcomponent contains the descriptor file for BSS V15.1.

The BSS integration package (fujitsu-bss-integration-pack.zip) contains two archive files, changes_v15.0_v15.2.zip and changes_v15.1_v15.2.zip in the doc/en subdirectory, where you can find detailed information on changes to the Web services. Use the changes.html file of every package for viewing the respective documentation.

Java 5 Client Applications with Certificate-Based Authentication

If applications integrated with BSS are implemented with JDK 5 and using certificate-based authentication, you need to set the following security property for GlassFish 3.1.2.2 in the GlassFish administration console:

sun-security.ssl.allowUnsafeRenegotiation=true.

This setting is required because the handshake protocol has changed since JDK 5. However it is not recommended. It is safer to migrated your applications to a higher Java version.

If credentials are passed for a Web service call, although certificate-based authentication is defined, authentication takes place using the user name and password. In order to use certificate-based authentication, the applications must be changed in a way that no user name and password is sent via HTTP headers. With GlassFish 2.1 and JDK 5, the credentials were not evaluated.

4 Restrictions

This chapter describes known restrictions of this BSS release.

Certificate-Based Authentication

Certificate-based authentication cannot be used when calling BSS functions whose execution require the specification of a user role. The user role determines whether the calling user is allowed to execute the function. Instead, you must use basic authentication for such Web service calls.

If you need to use certificate-based authentication in such scenarios anyway, contact your Fujitsu support organization.

Web Browsers

Concurrent Sessions

BSS does not support multiple sessions in Web browsers. This means that you cannot run and log in to BSS using several tabs or instances of the same Web browser. If you want to use multiple sessions, run BSS in different Web browsers, for example, in Microsoft Internet Explorer and Mozilla Firefox.

HTTP or HTTPS Configuration

BSS can be configured to use the HTTP or the HTTPS protocol. If you use both protocols at a time, PSP (payment service provider) integration will not work. This is due to the following:

The pre-configured PSP adapter for Heidelpay provides one <code>BASE_URL</code> parameter. This URL specifies the protocol to use for PSP communication. If you configure both protocols in BSS, the registration of payment types (e.g. credit cards) will fail. Although the data is stored correctly, the window for registering the payment type is not closed.

We recommend to configure the HTTPS protocol for all URLs used by BSS.

Report Error Messages

The following reports require input parameters, for example, a billing data key or dates:

- Supplier revenue report (can be generated by platform operators)
- Detailed billing report for an existing invoice of a customer (can be generated by suppliers)
- Detailed billing report for an existing invoice (can be generated by customers)

When the input parameter is entered in a wrong or invalid format, e.g. $_{\text{My}}$ <>key as a billing data key or 2012.5.12 as a date, the error message generated by the report engine does not contain text explaining the reason of the error. If you receive an error message when trying to generate a report, check the input parameter(s) again and ensure they are in the correct format. For example, you can find the date format in the dialog for entering the start and end date for a report; the billing data key is printed on the invoice.