Oracle® MICROS Simphony First Edition
Data Access Service Guide
Release 1.7 and Later
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Preface

The Data Access Service, which is used to import and export data to and from Simphony's database, is described in this document.

Audience

This document is intended for the following audiences:

- Installers / Consultants
- Customer Support
- Training Personnel
- MIS Personnel

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received and any associated log files
- Screen shots of each step you take

Documentation

Oracle Food and Beverage product documentation is available on the Oracle Help Center at https://docs.oracle.com/en/industries/food-beverage/pos.html

Revision History

Date	Description of Change
June 2007	• Initial publication
October 2007	• Minor edits
January 2018	• Formatting changes only
January 2019	• Updated Chapters 3, 4 and 5 about data Imports/Exports
January 2020	• Updated the product name on the title page

May 2020	• Updated Chapter 2 - Creating XML Scripts
	• Added Chapter 4 - Import/Export Password Enhancement
	• Updated Chapter 6 - Supported Data Access Attribute Types

Introduction

The Simphony First Edition Data Access Service is designed to handle the full range of Data Access requirements of a typical customer. The primary goal of the service is minimized total cost of ownership through consolidated systems management.

The service allows users to perform common database configuration tasks, such as menu item and employee maintenance, and provides sales exports to third party systems, streamlining management tasks and reducing overall complexity.

The input to the Simphony First Edition Data Access Service is an XML document, containing one or more commands to select or update items. The output from the service is an XML document containing returned records and error information when necessary. Simphony First Edition Data Access Service supports a number of commands, each operating on a single object type such as Employee, Menu Item, or Revenue Center Totals.

Backward Compatibility

Due to backward compatibility requirements of several Simphony First Edition customers, the Data Access Service is implemented through an application that makes a call to the web service.

Simphony First Edition does not support 8700sql but provides a mechanism to make use of existing delimited data files exports from third party systems with Data Access Service. To facilitate backwards compatibility, a front-end executable is provided to extend the input/export syntax.

During import operations, the executable embeds delimited file data into the XML script before passing the resulting XML document to the web service.

Export operations rely on the executable to receive the exported XML document and write the results to an external delimited file. All field and string delimiters are user-specifiable.

Security

As a Service-Oriented system, Simphony First Edition consists of many software modules, each of which typically represents a service in the system. For optimal security in a modular, distributed Service-Oriented system, the client that is requesting a service must be trusted as well as authorized before allowing the service to be carried out on the client's behalf. In Simphony First Edition, each service call requires the client to provide authentication credentials. These authentication credentials represent a user in the Simphony First Edition system who must have sufficient privileges to make the service request.

The XML script that defines the import or export requests does not contain the user's credentials. The client application that is making the service call is responsible for providing the user's credentials. When the import/export front-end executable, provided with Simphony First Edition, is used to make the service call, the user's credentials are stored in a configuration file on the same computer where the front-end executable is

running. Typically, a single 'proxy user' should be created in the database that is given privileges to make import/export requests.

1 Understanding Data Access Service

Data Access Service allows selective data exporting and importing from and to the Simphony First Edition database without the need to manually enter Simphony First Edition data into a format that can be used by other applications.

In addition, the Data Access Service imports and exports comma separated value (CSV) and delimited files that are easily exchanged with spreadsheet programs and database management systems.

- Data Access Service can be used in any of the following ways:
- Data can be exported to files used by other applications.
- Data from other applications can be imported into the Simphony First Edition database.

The Data Access Service can be run as part of a scheduled program via the operating system or as part of a Simphony First Edition PC Autosequence at an interval, such as monthly, weekly, or daily. A spreadsheet program can be automatically updated to reflect sales or another activity in Simphony First Edition.

Data Access Service Use Cases

At the Data Center Level

Simphony First Edition's Data Access Service at the data center level is used mainly for employee and menu item maintenance and includes the following use cases:

- Employee maintenance, such as changes to existing employee records and the creation of new employee records, can be conducted in a third-party employee maintenance software. The Data Access Service ImpExp.exe imports tdata from the third-party software to Simphony First Edition's database nightly after being called by a PC Autosequence.
- Payroll information from Simphony First Edition's database, including clock in and out times, can be exported to third-party software.
- Menu item maintenance, especially for retail items, can be conducted in a similar manner as employee maintenance. Changes made in a third-party software can be imported into Simphony First Edition's database using a PC Autosequence that calls Data Access Service's ImpEmp.exe program.
- Tender Media and Service Charge totals from the Simphony First Edition database can be exported to a third-party accounting program.

At the Workstation Level

Data Access Service can be used to enhance workstation functionality, for example:

- A one-touch sign-in button, similar to RES functionality, can be programmed on the touchscreen. This button calls a SIM event, which exports time card information to determine which retail cashiers are currently clocked in and then exports their sign-in ID from the database. It then displays a list of retail cashiers on the workstation. The employee at the workstation selects him/herself from the

list to sign in. With a one-touch sign-in button, the employee does not have to swipe his/her card to sign in each time, saving valuable operational time.

- Simphony First Edition's Data Access Service is called through SIM so that workstation SIM applications can export data from and into the database. An example of one use for this functionality would be a workstation SIM that prompts bartenders to enter in their drawer deposit totals at the end of a shift. The SIM then calls the SDA to export the Cash total for that employee and compares the amounts. The SIM can then print a chit that shows if the bartender was over or short.

How Data Access Service Works

Importing Data

When importing data, an XML script is first created using Update commands. The path to this XML file is then passed to the ImpExp.exe program, either directly from a Microsoft Windows command line or from a PC Autosequence. The CSV or delimited data is gathered by the ImpExp.exe program as determined by the attributes in the XML script.

The ImpEmp.exe files calls the EGateway Handler running on the application Server. The EGateway Handler then makes database calls to modify the database and returns results back to the ImpExp.exe program.
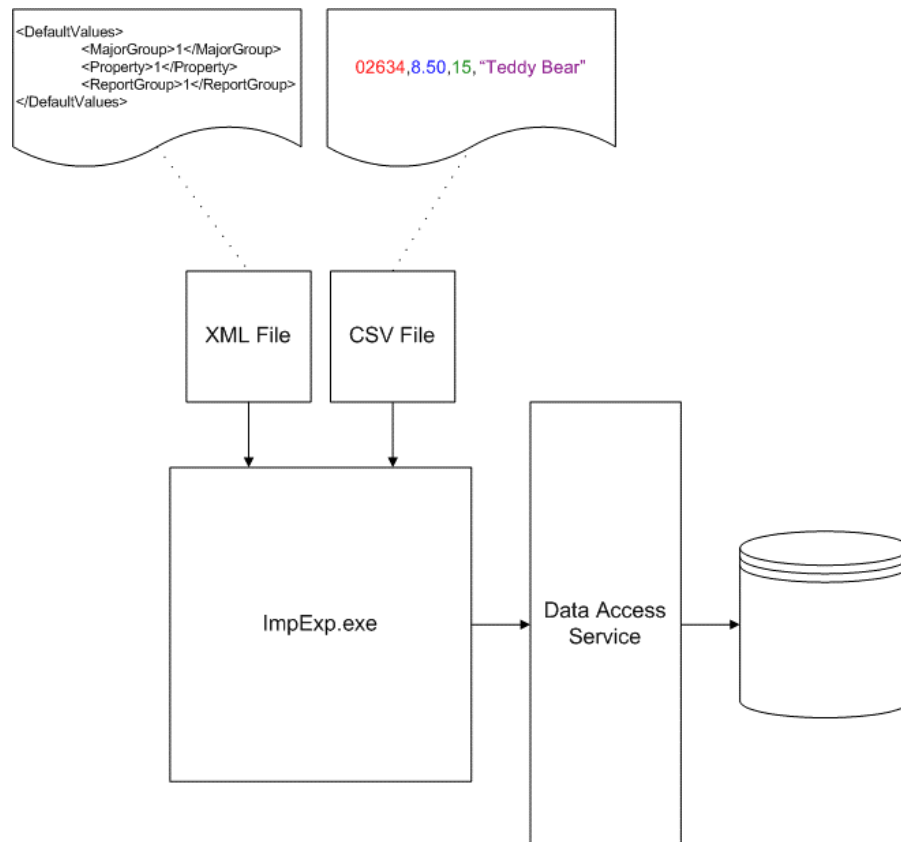
Figure 1-1 Importing Data

*The diagram above illustrates how Simphony First Edition's Data Access Service imports data. The dashed line from the XML file shows an example of the XML default values that can be used when importing the retail item **Teddy Bear**. The dashed line from the CSV file shows an example of the comma separated values used to import the same retail item. Within the CSV file example, the value **02634** shown in red text is the Number Lookup (NLU), the value **8.50** shown in blue text is the price of the item, the value **15** shown in green text is the family group, and the value **Teddy Bear** shown in purple is the name of the item.*

Exporting Data

When exporting data, an XML script is first created using Select commands. The path to this XML file is then passed to the ImpExp.exe program, either directly from a Microsoft Windows command line or from a PC Autosequence.

The ImpEmp.exe files calls the EGateway Handler running on the application Server. The EGateway Handler then makes database calls to query the database and returns results back to the ImpExp.exe program. The ImpExp.exe program then writes a CSV or delimited data file for output.

Note: XML script Delete commands are not currently supported in Simphony First Edition's Data Access Service.
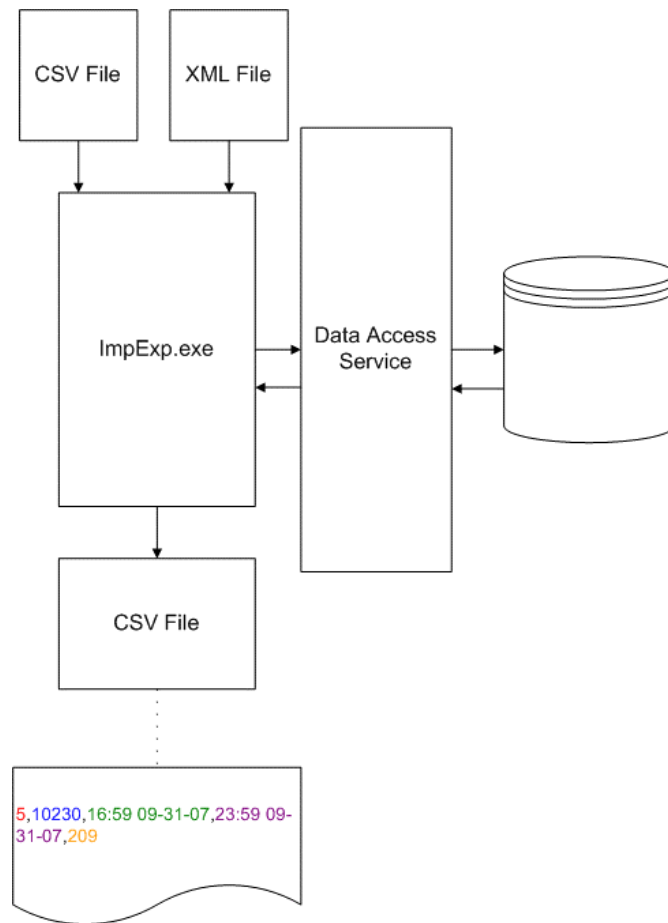
Figure 1-2 Exporting Data

*The diagram above illustrates how Simphony First Edition's Data Access Service exports data. The dashed line from the CSV file shows an example of the comma separated values used to export the timeclock schedule information. Within the CSV file example, the value **5** shown in red text is the property object number, the value **10230** shown in blue text is the employee object number, the value **16:59 09-31-07** shown in green text is the employee's clock in time, the value **23:59 09-31- 07** shown in purple is the employee's clock out time, and the value **209** shown in orange text is the employee's job code.*

2　Creating XML Scripts

When using the Data Access Service to export or import data, remember the following:

- Create a command file that tells Simphony First Edition's Data Access Service what information to access.
- Run the XML script from a Microsoft Windows command line or as part of a PC Autosequence.

If used in a PC Autosequence, the Data Access Service can automatically export or import the data you desire when reports are reset.

When setting up the import/export command file, several tags can be inserted into the **SDA Command**s section to control a how a command is performed. These tags help control the application flow when large amounts of data is being imported or exported. These commands can be designed to help the utility to operate without interruption.

Update Command

Update commands are often used when importing data into Simphony First Edition's database.

- Update commands support a DefaultValues block, which allows the system to specify values that apply to all records inserted.
- Update operations may be configured to insert records that do not exist.
- Update operations allow for conditions to be specified, similar to SQL WHERE clauses or a list of individual items can be supplied.
- An option exists to ignore errors both at the global level and for each individual Update command.

Example

</SDACommands>
```
        <SDACommand Type="Update">
```

Skip Errors Command

The **SkipError**s tag can be set to true to allow a command to continue without stopping due to an unexpected error. This is useful when multiple commands are included in the same command file.

Example

<SDACommands>
```
        <SkipErrors>True|False</SkipErrors>
```

Select Command

A **Select** command is likely to be used when exporting data from Simphony First Edition's database.

Example

```
<SDACommands>
     <SkipErrors>True</SkipErrors>
     <SDACommand Type="Select">
```

> **Note:** XML script Delete commands are not currently supported in Simphony First Edition's Data Access Service.

Timeout Command

The **Timeout** tag is used to override the default communication timeout value for a command. This can be employed if the command file is an .xml file type (the tag is not recognized if the xml extension is not used). Timeout values are based on the number of seconds you wish to override the communication timeout value. This is useful when large amounts of data take an extended period of time to be processed.

Example

```
<SDACommands>
     <URL>ServerName.com:port#/EGateway/EGateway.asmx</URL>
     <SkipErrors>true</SkipErrors>
     <Timeout>300</Timeout>
     <SDACommand Type="Update">
```

Chunking Data

Data sent using the Import/Export utility is broken into chunks. The default setting is 1MB per chunk. Users can modify the default setting by entering data size parameters in the command line. The valid number must be greater than 0 and less than 3.

```
ImpExp.exe <CommandFile.txt> <YourUserName> < YourPasswordToken>
<Optional Data Size Unit>
```

Example

ImpExp.exe CommandFile.txt *myUserName myPasswordToken* 2 sets the data output size to 2MB per chunk.

```
C:\Projects\Simphony\Output\Tools\ImpExp>ImpExp.exe CommandFile.txt myUserName myPassword 2
```

Figure 2-1 Chunking Data Command Syntax

A time delay has been added between each data chunk transfer. The default time delay is 5 seconds.

3   XML Syntax for Simphony First Edition Data Access

XML Input Syntax for Simphony First Edition Data Access

Oracle Food and Beverage recommends that XML scriptwriters adhere to the basic syntax structure as outlined below and as demonstrated in the examples that follow. In many instances, this preferred syntax is required in order to take advantage of evolving XML features.

```
<SDACommands>
        <SkipErrors>True|False</SkipErrors>
        <SDACommand Type="Select">
                <SkipErrors>True|False</SkipErrors>
                <ObjectType></ObjectType>
                <Attributes>
                        <Attribute></Attribute>
                </Attributes>
                <Conditions     LogicalOperation="AND|OR">
                        <Condition>
                            <Attribute></Attribute>
                             <Comparison>=|<>|>|>=|<|<=</Comparison>
                             <Value></Value>
                        </Condition>
                        <Conditions     LogicalOperation="AND|OR">
                        </Conditions>
                </Conditions>
                <Sorts>
        <Sort    Direction="ASC|DESC"></Sort>
 </Sorts>
 <File Type="Delimited|XML">
                <Path></Path>
                <FieldDelimiter></FieldDelimiter>
<StringDelimiter></StringDelimiter>
</File>
</SDACommand>
<SDACommand Type="Insert">
                <SkipErrors>True|False</SkipErrors>
                <ReplaceExisting>True|False</ReplaceExisting>
                <ObjectType></ObjectType>
<DefaultValues>

        </DefaultValues>
        <Data>
        </Data>
        <File Type="Delimited|XML">
                        <Path></Path>
                    <FieldDelimiter></FieldDelimiter>
                    <StringDelimiter></StringDelimiter>
        </File>
        </SDACommand>
            <SDACommand Type="Update">
                <SkipErrors>True|False</SkipErrors>
                <InsertMissing>True|False</InsertMissing>
```

```
                    <ObjectType></ObjectType>
                    <NewValues>
                    </NewValues>
                    <Conditions    LogicalOperation="AND|OR">
                          <Condition>
                                <Attribute></Attribute>
                                <Comparison>=|<>|>|>=|<|<=</Comparison>
                                <Value></Value>
                          </Condition>
                          <Conditions    LogicalOperation="AND|OR">
                          </Conditions>
                    </Conditions>
                    <DefaultValues>
                    </DefaultValues>
                    <Data>
                    </Data>
                    <File Type="Delimited|XML">
                          <Path></Path>
                          <FieldDelimiter></FieldDelimiter>
                          <StringDelimiter></StringDelimiter>
</File>
                    </SDACommand>
             </SDACommands>
```

# XML Output Syntax for Simphony First Edition Data Access

```
<SDAResults>
    <SDAResult>
        <Errors>
            <Error>
                <ErrorCode></ErrorCode>
                <ErrorString></ErrorString>
            </Error>
            </Errors>
            <Data>
            </Data>
    </SDAResult>
</SDAResults>
```

Import/Export Syntax Details

The following are optional tags:

- SkipErrors
- Conditions
- ReplaceExisting
- DefaultValues
- InsertMissing

The following are tags that may appear multiple times:

- SDACommand
- Attribute
- Condition
- Conditions (inside a Conditions block)
- Data

The following tags (or sets of tags) may not appear together:

- Condition and Conditions (within an outer Conditions block)
- [NewValues, Conditions] and [Data, File] (for an Update)
- Conditions and [Data, File] (for a Delete)

Example of XML Syntax used to Import Menu Item Information

```
<SDACommands>
        <URL>http://localhost:8080/EGateway/EGateway.asmx</URL>
        <SkipErrors>true</SkipErrors>
        <SDACommand Type="Update">
                <InsertMissing>True</InsertMissing>
                <ObjectType>MenuItem</ObjectType>
                <DefaultValues>
                        <Property>1109</Property>
                        <RevenueCenter>1</RevenueCenter>
                </DefaultValues>
                <File Type="Delimited">
                <Path>midef.upd.tmp</Path>
                 <FieldDelimiter>,</FieldDelimiter>
                 <StringDelimiter>"</StringDelimiter>
                   <Attributes>
                        <Attribute>ObjectNumber</Attribute>
                        <Attribute>DefinitionSequence</Attribute>
                        <Attribute>DefinitionName1</Attribute>
                        <Attribute>DefinitionName2</Attribute>
                        <Attribute>MainMenuLevel</Attribute>
                        <Attribute>SubMenuLevel</Attribute>
                        <Attribute>Class</Attribute>
                        <Attribute>NLUGroup</Attribute>
                        <Attribute>NLU</Attribute>
                        <Attribute>SLU</Attribute>
                   </Attributes>
                </File>
        </SDACommand>
</SDACommands>
```

Example of XML Syntax used to Export Menu Item Information

```
<SDACommands>
        <URL>http://localhost:8080/EGateway/EGateway.asmx</URL>
        <SkipErrors>true</SkipErrors>
        <SDACommand Type="Select">
            <ObjectType>MenuItem</ObjectType>
            <Attributes>
                    <Attribute>ObjectNumber</Attribute>
                    <Attribute>DefinitionSequence</Attribute>
                    <Attribute>DefinitionName1</Attribute>
                    <Attribute>DefinitionName2</Attribute>
                    <Attribute>MainMenuLevel</Attribute>
                    <Attribute>SubMenuLevel</Attribute>
                    <Attribute>Class</Attribute>
                    <Attribute>NLUGroup</Attribute>
                    <Attribute>NLU</Attribute>
                    <Attribute>SLU</Attribute>
```

```xml
            </Attributes>
            <Conditions    LogicalOperation="AND">
                        <Condition>
                    <Attribute>Property</Attribute>
                    <Comparison>=</Comparison>
                    <Value>1109</Value>
                        </Condition>
                         <Condition>
                    <Attribute>RevenueCenter</Attribute>
                    <Comparison>=</Comparison>
                        <Value>1</Value>
                        </Condition>
        </Conditions>
        <Sorts>
                    <Sort    Direction="UP">ObjectNumber</Sort>
         </Sorts>
         <File Type="Delimited">
         <Path>exp_midef.upd.tmp</Path>
         <FieldDelimiter>,</FieldDelimiter>
         <StringDelimiter>"</StringDelimiter>
    </File>
    </SDACommand>
</SDACommands>
```

4 Import/Export Password Enhancement

Beginning with the Simphony First Edition 1.8.0 release, the Import Export Password Configuration utility has been enhanced to pass along a user-defined password token, which replaces the actual password during the import/export process.

> **Note:** For versions prior to the Simphony First Edition 1.8.0 release, follow the procedures listed in Chapter's 5 and 6 for entering your logon credentials for importing or exporting data.

This utility can be run either as a scheduled program via the operating system, or as part of a Simphony First Edition PC Autosequence. To access the utility:

1. Navigate to the following location and execute the utility:

   `<Drive letter>:\Micros\Simphony\Tools\ImpExp\`**`ImpExp.exe`**

2. Enter **/config**
   The utility shows when the application is launched with the command line parameter named **`/config`**, which allows you to configure and store the users EMC password.
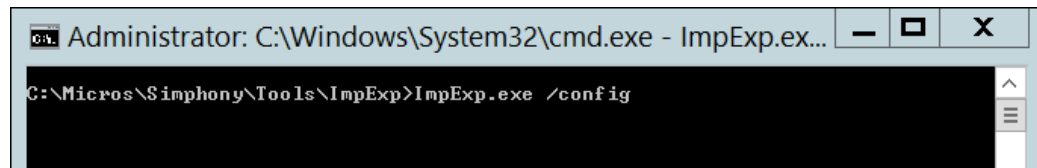
Figure 4-1 Command Prompt /config Syntax

3. In the **Password Token** field, enter a password.
   This allows you to enter the password token you can use on the command line.

4. Enter your EMC password in the **Password** field. The password entry is masked.
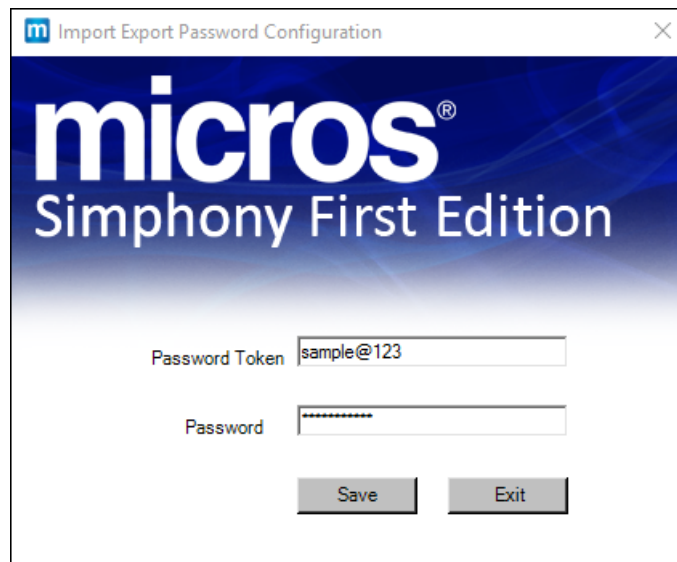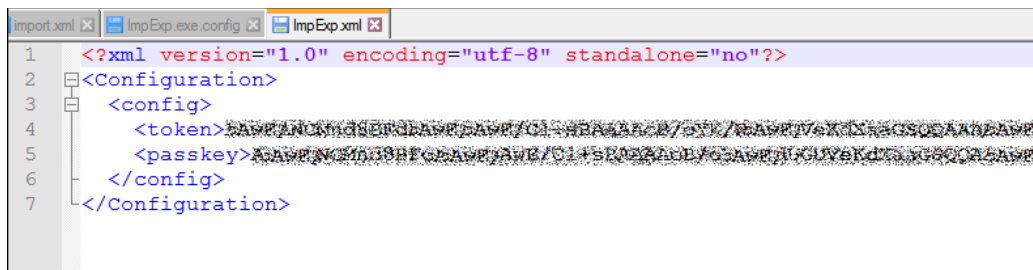
Figure 4-2 Import Export Password Configuration Utility

The password token and the password are stored in encrypted format in a file named **ImpExp.xml** created in the **ImpExp** folder after configuring the password token for the first time.

Figure 4-3 ImpExp.xml Encrypted Password Token and Password

5. You can now import or export files using your password token by executing the **ImpExp.exe**, and then entering the correct command prompt syntax. For example:

```
<Drive letter>:\<Import/Export.xml> <EMC Username> <Password Token>
```

5 Importing Data Files
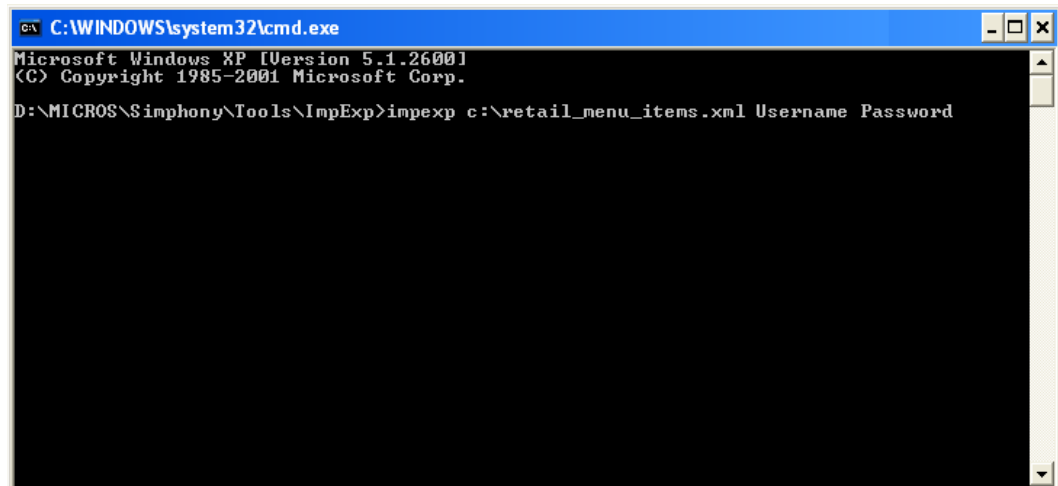
An XML file created using the XML Syntax described on page 3-1 can be used to import specific attribute data. Importing a file into the Simphony First Edition database may add or alter selective records; the entire destination file does not need to be overwritten.

Note: Each XML file supports multiple commands that can each contain an attribute, such as Barcode or MenuItem. Currently, multiple XML files cannot be joined.

The basic procedure for importing Simphony First Edition data is shown below:

1. Create the XML file using your preferred editor.
2. Enter the Command lines.
3. Enter the remaining syntax.
4. Enter your secure EMC logon credentials (See Figure 5-1 below).
   a. Where **Username** = your EMC username
   b. Where **Password** = your EMC password
5. Run the **ImpExp.exe** file located in the `MICROS\Simphony\Tools\ImpExp` folder from the Microsoft Windows command line, as shown below.
6. Enter the path and complete name of the XML file as the first parameter.

   In the example below, `C:\retail_menu_items.xml`, is the location and name of the XML file. Note that the **ImpExp.exe** file can also be called by a PC Autosequence.

Figure 5-1 Microsoft Windows Command Line - Importing

6   Exporting Data Files
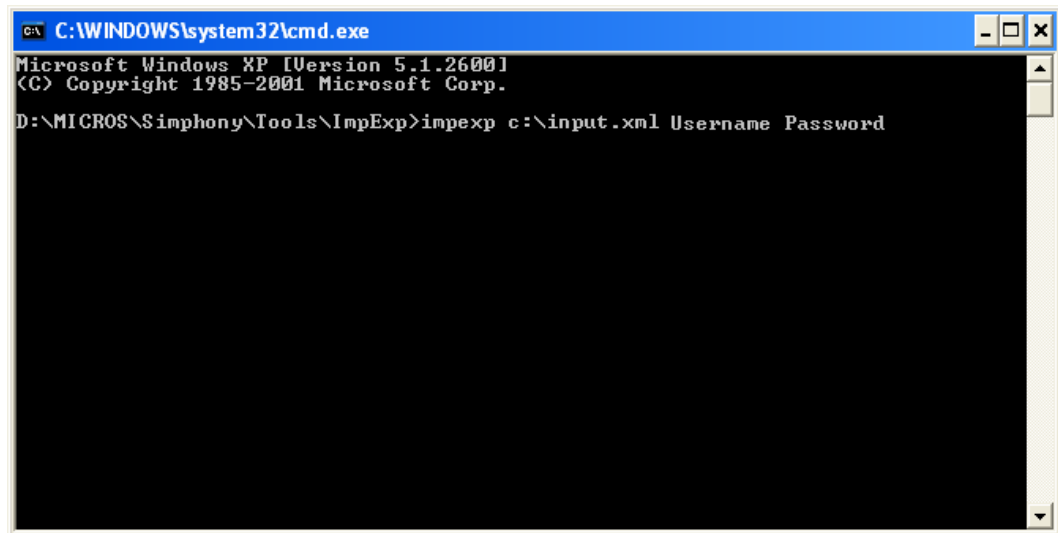
An XML file created using the XML Syntax described on page 3-1 can be used to export specific attribute data.

Note: Each XML file supports multiple commands that can each contain an attribute, such as Barcode or MenuItem. Currently, multiple XML files cannot be joined.

The basic procedure for exporting Simphony First Edition data is shown below:

1. Create the XML file using your preferred editor.
2. Enter the Command lines.
3. Enter the Output command.
4. Enter the remaining syntax.
5. Enter your secure EMC logon credentials (See Figure 6-1 below).
   a. Where **Username** = your EMC username
   b. Where **Password** = your EMC password
6. Run the **ImpExp.exe** file located in the `MICROS\Simphony\Tools\ImpExp` folder from the command line, as shown below.
7. Enter the path and complete name of the XML file as the first parameter.

In the example below, `C:\input.xml`, is the location and name of the XML file. Note that the **ImpExp.exe** file can also be called by a PC Autosequence.

Figure 6-1 Microsoft Windows Command Line - Exporting

7   Supported Data Access Attribute Types

Understanding the Attribute Tables

A Note on Data Types

The tables in this section include the Simphony First Edition Field Data Types, Max Width, and range for each attribute name.

Remember the following:

- Number fields never contain thousands-separator characters.
- The decimal point character defaults to "**.**" but can be changed.

Type Code Definitions

The table below defines the data types and max widths that are used in the Simphony First Edition attribute tables that follow.

Note the following:

- A variable-length number can never be less than one digit; it always appears even though its value may be zero.
- In multi-PC configurations, all totals are consolidated; the totals do not need to be exported from each PC individually.

Table 7-1 Type Code Definitions

Data Type	Max Width	Definition
Alphanumeric	n	An alphanumeric string of up to n characters.
Alphanumeric	n (Exact)	An alphanumeric string of exactly n characters.
Decimal	n	A decimal integer of up to n digits (not including its decimal character). For currency amounts, the decimal character, and the number of decimal places, are set by the DECIMAL_CHAR and DECIMAL_PLACES Control Commands. Some decimal integer fields may use a fixed or a floating decimal point, and are not affected by the DECIMAL_PLACES Control Command. For example, the Tare Weight field in the Menu Item Maintenance module allows a floating decimal point.
Hexadecimal	n (Exact)	A string of exactly n characters, each of which can only be one of the hexadecimal characters [0-9, A-F]. On export, A-F will always be upper case; on import, both cases are allowed.

Data Type	Max Width	Definition
Numeric	n	An integer of up to n digits that does not contain a decimal point.
Numeric	n (Exact)	An integer of exactly n digits that does not contain a decimal point.
TIME		Converted from 32-bit UNIX Time Field. A date/time in system local time, in the format HH:MM MM-DD-YY (e.g., 23:59 12-31-99). These strings are always fifteen characters long.
DATE		Defines the date format as MM-DD-YY.

Note: 'Exact' in the Max Width indicates the value must be no more or no less than the max width specified. If the value is less than the max width specified, the value is padded with either spaces (for alphanumeric values only) or zeros (for numeric, hexadecimal, and decimal values).

Barcode
Scope: Revenue Center

Table 7-2 Barcode - Revenue Center Level

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our barcode defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in V_HIERARCHY view and map to 'PropHierStrucID' of V_ HIERARCHY view, to get the reference of 'HierStrucID' present in V_Heirarchy we take the reference of 'HierStrucID' present in the BARCODE table and map to 'HierStrucID' of V_ HIERARCHY view).
RevenueCenter	Numeric	3	1–999	This is the 'ObjectNumber' under which we have our barcode defined and this can be obtained from V_HIERARCHY view from the database(take the reference of 'HierStrucID' present in the BARCODE table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the object number of our barcode definition and this can be obtained from BARCODE table from the database.
Code	Hexadecimal	14 (Exact)		This is the 'Code' of our barcode definition and this can be obtained from BARCODE table from the database.
MasterObjectNumber	Numeric	9	1–999,999,999	It is the menu item master object number which can be from MENU_ITEM_MASTER table.

Attribute Name	Data Type	Max Width	Range	Description
DefinitionSequence	Numeric	2	0–64	It is the sequence number of the menu item definition which can be obtained from MENU_ITEM_DEFINITION table.
PriceSequence	Numeric	1	0–8	It is the sequence number of the menu item price which can be obtained from MENU_ITEM_PRICE table.
AlternatePrice	Decimal	12	10 digits, sign, decimal	It is the value of 'Price' available in the BARCODE table.
AlternatePrepCost	Decimal	12	10 digits, sign, decimal	It is the value of 'PrepCost' available in the BARCODE table.

Cashier
Scope: Revenue Center

Table 7-3 Cashier - Revenue Center Level

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our cashier defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in V_HIERARCHY view and map to 'PropHierStrucID' of V_ HIERARCHY view, to get the reference of 'HierStrucID' present in V_Heirarchy we take the reference of 'HierStrucID' present in the CASHIER table and map to 'HierStrucID' of V_ HIERARCHY view).
RevenueCenter	Numeric	3	1–999	This is the 'ObjectNumber' under which we have our barcode defined and this can be obtained from V_HIERARCHY view from the database(take the reference of 'HierStrucID' present in the CASHIER table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the object number of our cashier definition and this can be obtained from CASHIER table from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' of our cashier definition and this can be obtained from CASHIER table from the database.

Discount (Select Only)

Scope: Property

Table 7-4 Discount (Select Only)

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our discounts defined and this can be obtained from V_HIERARCHY view from the database(take the reference of 'HierStrucID' present in the DISCOUNT table and map to
ObjectNumber	Numeric	9	1–999,999,999	V_ HIERARCHY view).
Name	Alphanumeric	32 (Exact)		This is the object number of our discount definition and this can be obtained from DISCOUNT table from the database.
TaxClass	Numeric	3	0–255	This is the 'NameID' of our discount definition and this can be obtained from DISCOUNT table from the database.
OptionBits	Hexadecimal	3 (Exact)		This is the object number of our discount definition and this can be obtained from DISCOUNT table from the database.
PrintOptionBits	Hexadecimal	1 (Exact)		This is the 'OptionBits' of our discount definition and this can be obtained from DISCOUNT table from the database.
NLU	Numeric	3	0–255	This is the 'PrintOptionBits' of our discount definition and this can be obtained from DISCOUNT table from the database.
SLU	Numeric	2	0–64	This is the 'Nlu' of our discount definition and this can be obtained from DISCOUNT table from the database.
MobileSLU	Numeric	2	0–64	This is the 'SluId' of our discount definition and this can be obtained from DISCOUNT table from the database.
Percentage	Decimal	7	000.000–100.000	This is the 'hhtSluId' of our discount definition and this can be obtained from DISCOUNT table from the database.
Amount	Decimal	12	10 digits, decimal	This is the 'Percentage' of our discount definition and this can be obtained from DISCOUNT table from the database.
PrivilegeGroup	Numeric	1	0–3	This is the 'Amount' of our discount definition and this can be obtained from DISCOUNT table from the database.

Attribute Name	Data Type	Max Width	Range	Description
Icon	Numeric	5	0–99,999	This is the 'PrivilegeGrp' of our discount definition and this can be obtained from DISCOUNT table from the database.

Employee
Scope: Enterprise

Note: The following pay rate related Employee attributes can be exported using Data Access Service: "JobCode," "RegularPayRate," "OvertimePayRate," and "PayRates."

Table 7-5 Employee

Attribute Name	Data Type	Max Width	Range	Description
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
LastName	Alphanumeric	16 (Exact)		This is the 'LastNameID' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
FirstName	Alphanumeric	8 (Exact)		This is the 'FirstNameId' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
ID	Hexadecimal	10 (Exact)		This is the 'IDNumber' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
CheckName	Alphanumeric	16 (Exact)		This is the 'CheckNameId' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
Group	Numeric	3	0–999	This is the 'EmplGroup' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
Level	Numeric	1	0–9	This is the 'EmpLevel' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
AlternateID	Numeric	10 (Exact)		This is the 'PcFuncID' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.

Attribute Name	Data Type	Max Width	Range	Description
UserName	Alphanumeric	20		This is the 'Username' corresponding to our Employee definition and this can be obtained from EMPLOYEE table from the database.
Language	Numeric	255		This is the 'ObjectNumber' corresponding to our Language definition and this can be obtained from LANGUAGE_INFORMATION table from the database (take the reference of 'LangId' present in the EMPLOYEE table and map to 'LangID' of LANGUAGE_INFORMATION table).
GlobalRole (Update Only)	Numeric	9	1–999,999,999	This is the 'RoleID' corresponding to our employee role definition and this can be obtained from ROLE_EMPLOYEE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of ROLE_EMPLOYEE table).
GlobalRoles (Update Only)	LIST			This is the 'ObjectNumber' corresponding to the role definition and this can be obtained from ROLE table from the database (take the reference of 'RoleID' present in the ROLE_EMPLOYEE table and map to 'RoleID' of ROLE table, for obtaining the 'RoleID' refer the above column description).
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our employee defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the EMPLOYEE_INSTANCE table and map to V_HIERARCHY view).
Class	Numeric	9	1–999,999,999	This is the 'ObjectNumber' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.
ISLPrivileges (Select Only)	Hexadecimal	1 (Exact)		This is the 'IslOptionBits' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.
EmployeeRevenueCenter	Numeric	3	1–999	This is the 'ObjectNumber' of Revenue center under which we have our employee defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the EMPLOYEE table and map to V_HIERARCHY view).
EmployeeOptionBits	Hexadecimal	2 (Exact)		This is the 'OptionBits' corresponding to our Employee Instance definition and this can be obtained from EMPLOYEE_INSTANCE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to EMPLOYEE_INSTANCE table).

Attribute Name	Data Type	Max Width	Range	Description
Training	Numeric	1	0,1	This is the 'Training' value corresponding to our Employee Instance definition and this can be obtained from EMPLOYEE_INSTANCE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to EMPLOYEE_INSTANCE table).
InternationalLdsID	Numeric	4 (Exact)	0000–9999	This is the 'LdsID' value corresponding to our Employee Instance definition and this can be obtained from EMPLOYEE_INSTANCE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to EMPLOYEE_INSTANCE table).
PayrollID	Alphanumeric	32 (Exact)		This is the 'PayrollID' value corresponding to our Employee Instance definition and this can be obtained from EMPLOYEE_INSTANCE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to EMPLOYEE_INSTANCE table).
LateClockInGrace	Numeric	2	0–99	This is the 'LateGrace' value corresponding to our Employee Instance definition and this can be obtained from EMPLOYEE_INSTANCE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to EMPLOYEE_INSTANCE table).
Status	Hexadecimal	1 (Exact)		This is the 'Status' value corresponding to our Employee Instance definition and this can be obtained from EMPLOYEE_INSTANCE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to EMPLOYEE_INSTANCE table).
CurrentRate (Select Only)	Numeric	1	1–8	This is the 'ActiveRate' corresponding to the time card definition and this can be obtained from TIMECARD table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of TIMECARD table).
ClockStatus (Select Only)	Numeric	3	0–4	This is the 'ClockStatus' corresponding to the time card definition and this can be obtained from TIMECARD table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of TIMECARD table).

Attribute Name	Data Type	Max Width	Range	Description
Descriptor (Update Only)	Alphanumeric	32 (Exact)		This is the 'NameID' corresponding to the employee descriptor definition for the employee and this can be obtained from EMPLOYEE_DESCRIPTOR table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of EMPLOYEE_DESCRIPTOR table).
Descriptors (Update Only)	List			This is the 'EmpDescID', 'LineNumber' corresponding to the employee descriptor definition for the employee and this can be obtained from EMPLOYEE_DESCRIPTOR table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of EMPLOYEE_DESCRIPTOR table).
Role (Update Only)	Numeric	9	1–999,999,999	This is the 'ObjectNumber' corresponding to the role definition and this can be obtained from ROLE table from the database (take the reference of 'RoleID' present in the ROLE_EMPLOYEE table and map to 'RoleID' of ROLE table, for obtaining the 'RoleID' refer the above column description).
JobCode	Numeric	9	1–999,999,999	This is the 'JobCodeID' corresponding to the Pay Rate definition for the employee and this can be obtained from PAY_RATE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of PAY_RATE table).
RegularPayRate	Decimal	12	10 digit, decimal	This is the 'RegularPay' corresponding to the Pay Rate definition for the employee and this can be obtained from PAY_RATE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of PAY_RATE table).
OvertimePayRate	Decimal	12	10 digit, decimal	This is the 'OverTimePay' corresponding to the Pay Rate definition for the employee and this can be obtained from PAY_RATE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of PAY_RATE table).
PayRates	LIST			This is the 'RegularPay', 'OverTimePay' corresponding to the Pay Rate definition for the employee and this can be obtained from PAY_RATE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of PAY_RATE table).

Attribute Name	Data Type	Max Width	Range	Description
OperatorRevenueCenter	Numeric	3	1–999	This is the 'ObjectNumber' under which we have our operator defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the OPERATOR table and map to V_ HIERARCHY view, for mapping to OPERATOR table use 'EmployeeId' of EMPLOYEE table and map it to 'EmployeeId' of OPERATOR table).
OperatorOptionBits	Numeric	8 (Exact)		This is the 'OptionBits' corresponding to our operator definition and this can be obtained from OPERATOR table from the database(take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of OPERATOR table).
Cashier	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our cashier is defined and this can be obtained from CASHIER table from the database (take the reference of 'CashierId' present in the OPERATOR table and map to 'CashierId' of CASHIER table, for mapping to OPERATOR table use 'EmployeeId' of EMPLOYEE table and map it to 'EmployeeId' of OPERATOR table).
TableCount	Numeric	3	0–999	This is the 'TableCount' corresponding to our operator definition and this can be obtained from OPERATOR table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of OPERATOR table).
CashDrawer	Numeric	1	0–2	This is the 'CashDrawer' corresponding to our operator definition and this can be obtained from OPERATOR table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of OPERATOR table).
DefaultTouchscreen	Numeric	3	0–255	This is the 'ObjectNumber' corresponding to our touchscreen definition and this can be obtained from TOUCHSCREEN table from the database (take the reference of 'TouchScreenID' present in the OPERATOR_TOUCHSCREEN table and map to 'TouchScreenID' of TOUCHSCREEN table along with the 'devicetype' value of value '3', to get OPERATOR_TOUCHSCREEN record use 'OperatorId' from OPERATOR table and map to 'OperatorID' of OPERATOR_TOUCHSCREEN table , for mapping to OPERATOR table use 'EmployeeId' of EMPLOYEE table and map it to 'EmployeeId' of OPERATOR table).

Attribute Name	Data Type	Max Width	Range	Description
DefaultMobileTouchscreen	Numeric	3	0–255	This is the 'ObjectNumber' corresponding to our touchscreen definition and this can be obtained from TOUCHSCREEN table from the database (take the reference of 'TouchScreenID' present in the OPERATOR_TOUCHSCREEN table and map to 'TouchScreenID' of TOUCHSCREEN table along with the 'devicetype' value of value '2', to get OPERATOR_TOUCHSCREEN record use 'OperatorId' from OPERATOR table and map to 'OperatorID' of OPERATOR_TOUCHSCREEN table , for mapping to OPERATOR table use 'EmployeeId' of EMPLOYEE table and map it to 'EmployeeId' of OPERATOR table).

Employee Class

Scope: Property

Table 7-6 Employee Class

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our employee defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the EMPLOYEE_CLASS table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.
ISLPrivileges	Hexadecimal	1 (Exact)		This is the 'IslOptionBits' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.
DayMinutesBeforeOvertime	Numeric	5	00:00–23:59	This is the 'DayMinutesOvertime' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.

Attribute Name	Data Type	Max Width	Range	Description
PeriodMinutesBeforeOvertime	Numeric	6	000:00–999:99	This is the 'PeriodMinutesOvertime' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.
PickupAddTransferStyle	Numeric	3	0–255	This is the 'PickupTransferStyle' corresponding to our Employee Class definition and this can be obtained from EMPLOYEE_CLASS table from the database.
DefaultTouchscreen	Numeric	3	0–255	This is the 'DfltTouchscreen' corresponding to our employee class touchscreen definition and this can be obtained from EMPLOYEE_CLASS_TOUCHSCREEN table from the database (take the reference of 'EmpClassID' present in the EMPLOYEE_CLASS table and map to 'EmpClassID' of EMPLOYEE_CLASS_TOUCHSCREEN table along with the 'devicetype' value of value '3').
DefaultMobileTouchscreen	Numeric	3	0–255	This is the 'DfltTouchscreen' corresponding to our employee class touchscreen definition and this can be obtained from EMPLOYEE_CLASS_TOUCHSCREEN table from the database (take the reference of 'EmpClassID' present in the EMPLOYEE_CLASS table and map to 'EmpClassID' of EMPLOYEE_CLASS_TOUCHSCREEN table along with the 'devicetype' value of value '2').

FamilyGroup

Scope: Property

Table 7-7 Family Group

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our Family Group defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the FAMILY_GROUP table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' corresponding to our Family Group definition and this can be obtained from FAMILY_GROUP table from the database.

Attribute Name	Data Type	Max Width	Range	Description
Name	Alphanumeric	16 (Exact)		This is the 'NameID' corresponding to our Family Group definition and this can be obtained from FAMILY_GROUP table from the database.
ReportGroup	Numeric	2	0–99	This is the 'ReportGroup' corresponding to our Family Group definition and this can be obtained from FAMILY_GROUP table from the database.

JobCode

Scope: Property

Table 7-8 Job Code

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our job code defined and this can be obtained from V_HIERARCHY view from the database(take the reference of 'HierStrucID' present in the JOBCODE table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our jobcode definition and this can be obtained from JOBCODE table from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' of our jobcode definition and this can be obtained from JOBCODE table from the database.
OptionBits	Hexadecimal	1 (Exact)		This is the 'OptionBits' of our jobcode definition and this can be obtained from JOBCODE table from the database.
ReportGroup	Numeric	3	0–255	This is the 'ReportGroup' of our jobcode definition and this can be obtained from JOBCODE table from the database.
RevenueCenter	Numeric	3	1–999	This is the 'ObjectNumber' under which we have our job code defined and this can be obtained from V_HIERARCHY view from the database(take the reference of 'AvailableHierStrucID' present in the JOBCODE table and map to 'HierStrucID' of V_ HIERARCHY view).

Supported Data Access Attribute Types

Attribute Name	Data Type	Max Width	Range	Description
Role	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our job code defined and this can be obtained from ROLE table from the database(take the reference of 'RoleID' present in the JOBCODE table and map to 'RoleID' of ROLE table).
Class	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our job code defined and this can be obtained from EMPLOYEE_CLASS table from the database(take the reference of 'EmpClassID' present in the JOBCODE table and map to 'EmpClassID' of EMPLOYEE_CLASS table).

MajorGroup

Scope: Property

Table 7-9 Major Group

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our major group defined and this can be obtained from V_HIERARCHY view from the database(take the reference of 'HierStrucID' present in the MAJOR_GROUP table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our major group definition and this can be obtained from MAJOR_GROUP table from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' of our major group definition and this can be obtained from MAJOR_GROUP table from the database.
ReportGroup	Numeric	2	0–99	This is the 'ReportGroup' of our major group definition and this can be obtained from MAJOR_GROUP table from the database.

Menu Item

Scope: Property

Table 7-10 Menu Item

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our menu item master defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the MENU_ITEM_MASTER table and map to V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our meu item master definition and this can be obtained from MENU_ITEM_MASTER table from the database.
MasterName	Alphanumeric	16 (Exact)		This is the 'NameID' of our menu item master definition and this can be obtained from MENU_ITEM_MASTER table from the database.
MajorGroup	Numeric	9	1–999,999,999	This is the 'ObjectNumber' corresponding to our major group definition and this can be obtained from MAJOR_GROUP table from the database (take the reference of 'MajGrpID' present in the MENU_ITEM_MASTER table and map to 'MajGrpID' of MAJOR_GROUP table).
FamilyGroup	Numeric	9	1–999,999,999	This is the 'ObjectNumber' corresponding to our family group definition and this can be obtained from FAMILY_GROUP table from the database (take the reference of 'FamGrpID' present in the MENU_ITEM_MASTER table and map to 'FamGrpID' of FAMILY_GROUP table).
ReportGroup	Numeric	1	0–8	This is the 'ReportGroup' of our menu item master definition and this can be obtained from MENU_ITEM_MASTER table from the database.
Status	Hexadecimal	1 (Exact)		This is the 'Status' of our menu item master definition and this can be obtained from MENU_ITEM_MASTER table from the database.
RevenueCenter	Numeric	3	1–999	This is the 'ObjectNumber' under which we have our menu item definition defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the MENU_ITEM_DEFINITION table and map to 'HierStrucID' of V_ HIERARCHY view).

Attribute Name	Data Type	Max Width	Range	Description
DefinitionSequence	Numeric	2	1–64	This is the 'SequenceNum' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
DefinitionName1	Alphanumeric	16 (Exact)		This is the 'Name1ID' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
DefinitionName2	Alphanumeric	16 (Exact)		This is the 'Name2ID' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
Class	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our menu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
SLUSort	Numeric	2	0–99	This is the 'SLUSort' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
NLU	Hexadecimal	12 (Exact)		This is the 'NluNumber' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
NLUGroup	Numeric	2	0–32	This is the 'NluIndex' corresponding to our NLU group definition and this can be obtained from NUMBER_LOOKUP table from the database (take the reference of 'NluID' present in the MENU_ITEM_DEFINITION table and map to 'NluID' of NUMBER_LOOKUP table).
SLU	Numeric	3	0–127	This is the 'SluIndex' corresponding to our SLU definition and this can be obtained from SCREEN_LOOKUP table from the database (take the reference of 'SluID' present in the MENU_ITEM_DEFINITION table and map to 'SluID' of SCREEN_LOOKUP table).
MobileSLU	Numeric	3	0–127	This is the 'SluIndex' corresponding to our SLU definition and this can be obtained from SCREEN_LOOKUP table from the database (take the reference of 'HhtSluID' present in the MENU_ITEM_DEFINITION table and map to 'SluID' of SCREEN_LOOKUP table).
Surcharge	Decimal	12	10 digits, sign, decimal	This is the 'Surcharge' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
DefinitionOptionBits	Hexadecimal	1 (Exact)		This is the 'OptionBits' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
SpecialCount	Numeric	4	0–9999	This is the 'SpecialCount' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.

Attribute Name	Data Type	Max Width	Range	Description
Icon	Numeric	5	0–99,999	This is the 'IconNumber' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
Tare	Decimal	8	0.000000–838607	This is the 'Tare' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
KDSPrepTime	Numeric	5	0–99,999	This is the 'PrepTime' of our menu item definition and this can be obtained from MENU_ITEM_DEFINITION table from the database.
MainMenuLevel	Hexadecimal	2 (Exact)		This is the 'MainMenuLvlID' corresponding to our menu item definition and this can be obtained from MENU_ITEM_DEFINITION _MAIN table from the database (take the reference of 'MenuItemDefID' present in the MENU_ITEM_DEFINITION table and map to 'MenuItemDefID' of MENU_ITEM_DEFINITION _MAIN table).
SubMenuLevel	Hexadecimal	2 (Exact)		This is the 'SubMenuLvlID' corresponding to our menu item definition and this can be obtained from MENU_ITEM_DEFINITION _SUB table from the database (take the reference of 'MenuItemDefID' present in the MENU_ITEM_DEFINITION table and map to 'MenuItemDefID' of MENU_ITEM_DEFINITION _SUB table).
PriceSequence	Numeric	1	1–8	This is the 'SequenceNum' of our menu item price definition and this can be obtained from MENU_ITEM_PRICE table from the database.
PriceOptionBits	Hexadecimal	1 (Exact)		This is the 'OptionBits' of our menu item price definition and this can be obtained from MENU_ITEM_PRICE table from the database.
Price	Decimal	12	10 digits, sign, decimal	This is the 'Price' of our menu item price definition and this can be obtained from MENU_ITEM_PRICE table from the database.
PrepCost	Decimal	12	10 digits, sign, decimal	This is the 'PrepCost' of our menu item price definition and this can be obtained from MENU_ITEM_PRICE table from the database.
TaxClass	Numeric	3	0–255	This is the 'ObjectNumber' corresponding to our menu item tax class definition and this can be obtained from TAX_CLASS table from the database (take the reference of 'TaxClassID' present in the MENU_ITEM_PRICE table and map to 'TaxClassID' of TAX_CLASS table).
MenuLevel	Numeric	1	0–8	This is the 'MenuLvlIndex' of our menu item price definition and this can be obtained from MENU_ITEM_PRICE table from the database.

MenuItemClass

Scope: Revenue Center

Table 7-11 Menu Item Class

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our menu item class defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in V_HIERARCHY view and map to 'PropHierStrucID' of V_ HIERARCHY view, to get the reference of 'HierStrucID' present in V_Heirarchy we take the reference of 'HierStrucID' present in the MENU_ITEM_CLASS table and map to 'HierStrucID' of V_ HIERARCHY view).
RevenueCenter	Numeric	3	1–999	This is the 'ObjectNumber' under which we have our menu item class definition defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the MENU_ITEM_CLASS table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
TaxClass	Numeric	3	0–255	This is the 'ObjectNumber' corresponding to our menu item tax class definition and this can be obtained from TAX_CLASS table from the database (take the reference of 'TaxClassID' present in the MENU_ITEM_CLASS table and map to 'TaxClassID' of TAX_CLASS table).
OptionBits	Hexadecimal	6 (Exact)		This is the 'OptionBits' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
MainMenuLevel (Select Only)	Hexadecimal	2 (Exact)		This is the 'TransDfltMain' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
SubMenuLevel (Select Only)	Hexadecimal	2 (Exact)		This is the 'TransDfltSub' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.

Attribute Name	Data Type	Max Width	Range	Description
PrintingOptionBits	Hexadecimal	1 (Exact)		This is the 'PrintOptionBits' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
PrintGroup	Numeric	1	1–8	This is the 'PrintGroup' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
PrivilegeGroup	Numeric	1	0–3	This is the 'PrivilegeGroup' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
SalesItemizer	Numeric	2	1–16	This is the 'SlsItmzrID' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
DiscountItemizer	Numeric	1	0–15	This is the 'DscntItmzrIndex' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
ServiceChargeItemizer	Numeric	1	0–8	This is the 'ServiceChargeItemizer' of our meu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.
HighAmountLockout	Numeric	8 (Exact)	0–99,999,999	This is the 'Halo' of our menu item class definition and this can be obtained from MENU_ITEM_CLASS table from the database.

RevenueCenter (Select Only)

Scope: Property

Table 7-12 Revenue Center (Select Only)

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our RVC is defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in V_HIERARCHY view and map to 'PropHierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	3	1–999	This is the 'ObjectNumber' of our RVC definition and this can be obtained from V_ HIERARCHY view from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' of our RVC definition and this can be obtained from V_ HIERARCHY view from the database.

Supported Data Access Attribute Types

Role (Select Only)

Scope: Enterprise

Table 7-13 Role (Select Only)

Attribute Name	Data Type	Max Width	Range	Description
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our Role definition and this can be obtained from ROLE table from the database.
Name	Alphanumeric	64		This is the 'NameID' of our Role definition and this can be obtained from ROLE table from the database.
Comment	Alphanumeric	2000		This is the 'RoleComment' of our Role definition and this can be obtained from ROLE table from the database.
TransactionPrivileges	Hexadecimal	20 (Exact)		This is the Transaction 'PrivilegeNumber' under which we have our Role Privilege defined and this can be obtained from ROLE_PRIVILEGE table from the database (take the reference of 'RoleID' present in ROLE table and map to 'RoleID' of ROLE_PRIVILEGE table).
SupervisoryPrivileges	Hexadecimal	8 (Exact)		This is the Supervisory 'PrivilegeNumber' under which we have our Role Privilege defined and this can be obtained from ROLE_PRIVILEGE table from the database (take the reference of 'RoleID' present in ROLE table and map to 'RoleID' of ROLE_PRIVILEGE table).
TimeclockPrivileges	Hexadecimal	3 (Exact)		This is the TimeClock 'PrivilegeNumber' under which we have our Role Privilege defined and this can be obtained from ROLE_PRIVILEGE table from the database (take the reference of 'RoleID' present in ROLE table and map to 'RoleID' of ROLE_PRIVILEGE table).

ServiceCharge (Select Only)

Scope: Property

Table 7-14 Service Charge (Select Only)

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our service charge definition defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the SERVICE_CHARGE table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
TaxClass	Numeric	3	0–255	This is the 'ObjectNumber' corresponding to our service charge tax class definition and this can be obtained from TAX_CLASS table from the database (take the reference of 'TaxClassID' present in the SERVICE_CHARGE table and map to 'TaxClassID' of TAX_CLASS table).
OptionBits	Hexadecimal	6 (Exact)		This is the 'OptionBits' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
PrintOptionBits	Hexadecimal	1 (Exact)		This is the 'PrintOptionBits' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
NLU	Numeric	3	0–255	This is the 'Nlu' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
SLU	Numeric	2	0–64	This is the 'SluIndex' corresponding to our service charge definition and this can be obtained from SCREEN_LOOKUP table from the database (take the reference of 'SluID' present in the SERVICE_CHARGE table and map to 'SluID' of SCREEN_LOOKUP table).

Supported Data Access Attribute Types

Attribute Name	Data Type	Max Width	Range	Description
MobileSLU	Numeric	2	0–64	This is the 'SluIndex' corresponding to our service charge definition and this can be obtained from SCREEN_LOOKUP table from the database (take the reference of 'HhtSluID' present in the SERVICE_CHARGE table and map to 'SluID' of SCREEN_LOOKUP table).
Percentage	Decimal	7	000.000–100.000	This is the 'Percentage' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
Amount	Decimal	12	10 digits, decimal	This is the 'Amount' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
TipsPaidTenderMedia	Numeric	9	1–999,999,999	This is the 'TipsPaidTenderMedia' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
TipsPaidPercentage	Numeric	8	000.0000-100.0000	This is the 'TipsPaidPercentage' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
PrivilegeGroup	Numeric	1	0–3	This is the 'PrivilegeGrp' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.
Icon	Numeric	5	0–99,999	This is the 'IconNumber' of our service charge definition and this can be obtained from SERVICE_CHARGE table from the database.

ServiceChargeTotals (Select Only)

Scope: Property

Table 7-15 Service Charge Totals (Select Only)

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'LocationID' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL tables depending on the context for which ServiceChargeTotals is selected and can be obtained from Reporting and Analytics Database (take reference of 'OrganizationID' of REVENUE_CENTER table and map it to 'OrganizationID' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL table to get 'LocationID' value).
RevenueCenter	Numeric	3	1–999	This is the 'revenueCenterPOSRef' and this can be obtained from Reporting and Analytics Database ('revenueCenterPOSRef' maps to 'ObjectNumber' of RVC in V_HEIRARCHY view in Simphony database).
BusinessDate	DATE			This is the 'BusinessDate ' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL tables depending on the context for which ServiceChargeTotals is selected and can be obtained from Reporting and Analytics Database(take reference of 'OrganizationID' of REVENUE_CENTER table from Simphony database and map it to 'OrganizationID' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL table to get 'LocationID' value and then use it to extract 'BusinessDate').
ObjectNumber	Numeric	9	1–999,999,999	This is the 'serviceChargePOSRef' of SERVICE_CHARGE table and this can be obtained from Reporting and Analytics Database (take the reference of 'ServiceChargeID' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL table depending on the context and map it to 'ServiceChargeID' of SERVICE_CHARGE table to extract 'serviceChargePOSRef').

Supported Data Access Attribute Types

Attribute Name	Data Type	Max Width	Range	Description
Name	Alphanumeric	16		This is the 'name' of SERVICE_CHARGE table and this can be obtained from Reporting and Analytics Database (take the reference of 'ServiceChargeID' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL table depending on the context and map it to 'ServiceChargeID' of SERVICE_CHARGE table to extract 'name').
Count	Numeric	6	5 digits, sign	This is the 'ServiceChargeCount ' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL tables depending on the context for which ServiceChargeTotals is selected and can be obtained from Reporting and Analytics Database(take reference of 'OrganizationID' of REVENUE_CENTER table from Simphony database and map it to 'OrganizationID' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL table to get 'LocationID' value and then use it to extract 'ServiceChargeCount').
Amount	Decimal	17	15 digits, sign, decimal	This is the sum of 'ServiceChargeTotal ' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL tables depending on the context for which ServiceChargeTotals is selected and can be obtained from Reporting and Analytics Database(take reference of 'OrganizationID' of REVENUE_CENTER table from Simphony database and map it to 'OrganizationID' of SERVICE_CHARGE_DAILY_TOTAL or EMPLOYEE_DP_SVC_CHRG_TOTAL or CASHIER_DP_SVC_CHRG_TOTAL table to get 'LocationID' value and then use it to extract 'ServiceChargeTotal').
EmployeeObjectNumber	Numeric	9	1–999,999,999	This is the 'PosRef' of EMPLOYEE table and this can be obtained from Reporting and Analytics Database (take the reference of 'EmployeeID' of EMPLOYEE_DP_SVC_CHRG_TOTAL and map it to 'EmployeID' of EMPLOYEE table to extract 'Posref').
EmployeeFirstName	Alphanumeric	8		This is the 'FirstName' of EMPLOYEE table and this can be obtained from Reporting and Analytics Database (take the reference of 'EmployeeID' of EMPLOYEE_DP_SVC_CHRG_TOTAL and map it to 'EmployeID' of EMPLOYEE table to extract 'FirstName').

Attribute Name	Data Type	Max Width	Range	Description
EmployeeLastName	Alphanumeric	16		This is the 'LastName' of EMPLOYEE table and this can be obtained from Reporting and Analytics Database (take the reference of 'EmployeeID' of EMPLOYEE_DP_SVC_CHRG_TOTAL and map it to 'EmployeID' of EMPLOYEE table to extract 'LastName').
CashierObjectNumber	Numeric	9	1–999,999,999	This is the 'cashierPOSRef' of CASHIER table and this can be obtained from Reporting and Analytics Database (take the reference of 'CashierId' of CASHIER_DP_SVC_CHRG_TOTAL and map it to 'CashierId' of CAHSIER table to extract 'cashierPOSRef').
CashierName	Alphanumeric	16		This is the 'name' of CASHIER table and this can be obtained from Reporting and Analytics Database (take the reference of 'CashierId' of CASHIER_DP_SVC_CHRG_TOTAL and map it to 'CashierId' of CAHSIER table to extract 'name').

Tender Media

Scope: Property

Table 7-16 Tender Media

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our Tender media definition defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the TENDER_MEDIA table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
Name	Alphanumeric	16 (Exact)		This is the 'NameID' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
Type	Numeric	1	1–5	This is the 'TendMedType' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.

Attribute Name	Data Type	Max Width	Range	Description
Preamble	Alphanumeric	8		This is the 'Preamble 'of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
OptionBits	Hexadecimal	11 (Exact)		This is the 'OptionBits' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
PrintOptionBits	Hexadecimal	1 (Exact)		This is the 'PrintOptionBits' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
NLU	Numeric	3	0–255	This is the 'Nlu' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
SLU	Numeric	2	0–64	This is the 'SluIndex' corresponding to our tender media definition and this can be obtained from SCREEN_LOOKUP table from the database (take the reference of 'SluID' present in the TENDER_MEDIA table and map to 'SluID' of SCREEN_LOOKUP table).
MobileSLU	Numeric	2	0–64	This is the 'SluIndex' corresponding to our tender media definition and this can be obtained from SCREEN_LOOKUP table from the database (take the reference of 'HhtSluID' present in the TENDER_MEDIA table and map to 'SluID' of SCREEN_LOOKUP table).
HighAmountLockout	Numeric	2 (Exact)	00–79	This is the 'Halo' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
PrivilegeGroup	Numeric	1	0–3	This is the 'PrivilegeGrp' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
EstimatedTipPercentage	Decimal	8	000.0000–100.0000	This is the 'EstimatedTip' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
SecondaryFloorPercentage	Decimal	8	000.0000–100.0000	This is the 'SecondaryFloorPcnt' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
BaseFloor	Decimal	12	10 digits, decimal	This is the 'BaseFloor' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
SecondaryFloor	Decimal	12	10 digits, decimal	This is the 'SecondaryFloor' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.

Attribute Name	Data Type	Max Width	Range	Description
InitialAuthorization	Decimal	12	10 digits, decimal	This is the 'InitialAuth' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
DefaultTipPercentage	Numeric	3	0–100	This is the 'DefaultTipPcnt' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
InterfaceIndex	Numeric	1	0–8	This is the 'InterfaceIndex' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
Icon	Numeric	5	0–99,999	This is the 'IconNumber' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
ChargedTipServicecharge	Numeric	9	1–999,999,999	This is the 'ChargeTipServiceChgNumber' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
QuickServiceLimit	Decimal	12	10 digits, decimal	This is the 'QuickServiceLimit' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.
OfflineEstimatedTipPercentage	Numeric	8	000.0000– 100.0000	This is the 'OfflineEstimatedTipPercentage' of our Tender media definition and this can be obtained from TENDER_MEDIA table from the database.

TimeCard (Select Only)

Scope: Property

Table 7-17 Time Card (Select Only)

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have property for which time card definition is defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the V_TIMECARD view and map to 'HierStrucID' of V_ HIERARCHY view).

Attribute Name	Data Type	Max Width	Range	Description
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our time card definition defined and this can be obtained from V_TIMECARD view from the database (take the reference of 'HierStrucID' present in the V_TIMECARD view and map to 'HierStrucID' of V_ HIERARCHY view).
CurrentRate	Numeric	1	1–8	This is the 'ActiveRate' of our TimeCard definition and this can be obtained from V_TIMECARD view from the database.
ClockStatus[1]	Numeric	3	0–4	This is the 'ClockStatus' of our TimeCard definition and this can be obtained from V_TIMECARD view from the database.
SequenceNumber	Numeric	3	1–999	This is the 'timeCardDetailPOSRef' of our TimeCard definition and this can be obtained from TIME_CARD_DETAIL table from the Reporting and Analytics database.
Rate	Numeric	1	1–8	This is the 'ActiveRate' of our TimeCard definition and this can be obtained from V_TIMECARD view from the database.
Revenue Center	Numeric	3	1–999	This is the 'revenueCenterPOSRef' and this can be obtained from REVENUE_CENTER table of Reporting and Analytics Database ('revenueCenterPOSRef' maps to 'ObjectNumber' of RVC in V_HEIRARCHY view in Simphony database).
ClockIn	TIME			This is the 'ClockInDateTime' of our TimeCard definition and this can be obtained from TIME_CARD_DETAIL table from the Reporting and Analytics database.
ClockOut	TIME			This is the 'ClockOutDateTime' of our TimeCard definition and this can be obtained from TIME_CARD_DETAIL table from the Reporting and Analytics database.
ClockInStatus[2]	Numeric	3	0–4	This is the 'ClockInStatus' of our TimeCard definition and this can be obtained from TIME_CARD_DETAIL table from the Reporting and Analytics database.

[1] Refer to the Clock In/Out Status table above.

[2] Refer to the "Clock In or Clock Out Status", on page 6-12 of, Feature Reference Manual table below.

Attribute Name	Data Type	Max Width	Range	Description
ClockOutStatus[3]	Numeric	3	0–4	This is the 'ClockOutStatus' of our TimeCard definition and this can be obtained from TIME_CARD_DETAIL table from the Reporting and Analytics database.
Regular	Numeric	11	10 digits, sign	This is the 'RegularHours' of our TimeCard definition and this can be obtained from TIME_CARD_DETAIL table from the Reporting and Analytics database.
Overtime	Numeric	11	10 digits, sign	This is the 'OverTime1Hours' of our TimeCard definition and this can be obtained from TIME_CARD_DETAIL table from the Reporting and Analytics database.

Clock In/Out Status

Table 7-18 Clock In / Out Status

Clock In/ Out Status	
0	Clocked out
1	On unpaid break
2	On paid break
3	Clock in without schedule
4	Clock in with schedule

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[3] Refer to the "Clock In or Clock Out Status", on page 6-12 of, Feature Reference Manual table below.

Clock In or Clock Out Status

Table 7-19 Clock In or Clock Out Status

	Clock In or Clock Out Status	Value	Digit
1	Time Clock Adjustment Name # 1	8	1
2	Time Clock Adjustment Name # 2	4	
3	Time Clock Adjustment Name # 3	2	
4	Time Clock Adjustment Name # 4	1	
5	Time Clock Adjustment Name # 5	8	2
6	Time Clock Adjustment Name # 6	4	
7	Time Clock Adjustment Name # 7	2	
8	Time Clock Adjustment Name # 8	1	
9	Time Clock Adjustment Name # 9	8	3
10	Time Clock Adjustment Name # 10	4	
11	Time Clock Adjustment Name # 11	2	
12	Time Clock Adjustment Name # 12	1	
13	Time Clock Adjustment Name # 13	8	4
14	Time Clock Adjustment Name # 14	4	
15	Time Clock Adjustment Name # 15	2	
16	Time Clock Adjustment Name # 16	1	

TimeclockSchedule

Scope: Property

Table 7-20 Timeclock Schedule

Attribute Name	Data Type	Max Width	Range	Description
Property	Numeric	9	1–999,999,999	This is the 'ObjectNumber' under which we have our Tender media definition defined and this can be obtained from V_HIERARCHY view from the database (take the reference of 'HierStrucID' present in the TIMECLOCK_SCHEDULE table and map to 'HierStrucID' of V_ HIERARCHY view).
ObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our TimeClock Schedule definition and this can be obtained from TIMECLOCK_SCHEDULE table from the database.
EmployeeObjectNumber	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our employee definition and this can be obtained from EMPLOYEE table from the database (take the reference of 'EmployeeID' present in the EMPLOYEE table and map to 'EmployeeID' of TIMECLOCK_SCHEDULE table to extract 'ObjectNumber').
ClockIn	TIME			This is the 'ClockIn' of our TimeClock Schedule definition and this can be obtained from TIMECLOCK_SCHEDULE table from the database.
ClockOut	TIME			This is the 'ClockOut' of our TimeClock Schedule definition and this can be obtained from TIMECLOCK_SCHEDULE table from the database.
JobCode	Numeric	9	1–999,999,999	This is the 'ObjectNumber' of our job code definition and this can be obtained from JOB_CODE table from the database (take the reference of 'ObjectCodeID' present in the JOB_CODE table and map to 'ObjectCodeID' of TIMECLOCK_SCHEDULE table to extract 'ObjectNumber').
ReportGroup	Numeric	3	0–255	This is the 'RptGrp' of our TimeClock Schedule definition and this can be obtained from TIMECLOCK_SCHEDULE table from the database.