Applies to:
Time dependent hierarchies are often used by organizations to help them organize their master data which changes like employee hierarchies, material hierarchies etc. This is applicable for BI 7.0 Version. But since Hierarchy loads do not have a 7.0 interface yet, this data load was done using the 3.x dataflow. For more information, visit the Business Intelligence homepage.

Summary
This article displays the process creation of Time dependent Hierarchy Characteristic and loading of Data for the same in BI.

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Author Bio
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Introduction

Objective

The objective of this article is to describe step by step process for creation of Time Dependent characteristic and Loading the Data for the same from the Source system.

Business Requirement

We got the requirement to Load the Consolidation group Hierarchy in BI for different time periods.

The allocation of consolidation units to their consolidation groups is versioned and date sensitive. Consolidation groups are the building blocks of consolidation hierarchies.

Companies, profit centers or business areas can be grouped into one or more consolidation groups in multilevel hierarchies for consolidations.

You can also create parallel hierarchies so that you can prepare consolidation reports for same data using multiple criteria such as companies and business segment.

Steps involved:

SAP R/3 Steps

Login to R/3 system.

In R/3 Consolidation Groups Hierarchy will be maintained in

```
<table>
<thead>
<tr>
<th>Consolidation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXGP - Global parameters</td>
</tr>
<tr>
<td>Master data</td>
</tr>
<tr>
<td>Consolidation groups</td>
</tr>
<tr>
<td>Hierarchy</td>
</tr>
<tr>
<td>CXIX - Maintain</td>
</tr>
<tr>
<td>CXIY - Display</td>
</tr>
<tr>
<td>CXIP - Create</td>
</tr>
<tr>
<td>CXIQ - Change</td>
</tr>
<tr>
<td>CXIR - Display</td>
</tr>
<tr>
<td>Consolidation units</td>
</tr>
<tr>
<td>CXIM - Create</td>
</tr>
<tr>
<td>CXIN - Change</td>
</tr>
<tr>
<td>CXIO - Display</td>
</tr>
</tbody>
</table>
```


Pass the Global Parameters.
We would like to load this maintained hierarchy in BI from R/3

**Consolidation group hierarchy Display**

<table>
<thead>
<tr>
<th>Hierarchy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3</td>
<td>Profit centers</td>
</tr>
<tr>
<td>P1</td>
<td>Profit Center</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Group Total consol</td>
</tr>
<tr>
<td>CP6</td>
<td>DMG CPG</td>
</tr>
<tr>
<td>COG</td>
<td>Cost of Change</td>
</tr>
<tr>
<td>COG - 56R</td>
<td>Cost of Change Group</td>
</tr>
<tr>
<td>COG - DMG</td>
<td>Cost of Change</td>
</tr>
</tbody>
</table>

Please explain how you came to this screen as CX1X gives different popup screen

Already a standard DataSource (0CS_GROUP_CSCG_HIER) exits in R/3 which can be used to load the data from Source system,
Step 1 Installation of DataSource from Business Content

Go to TCode : RSA5 in R/3 (Source system) and follow the path.

Standard DataSource Exists in the source system.
Step 2: Activate the DataSource

To activate the DataSource.

Select the DataSource 0CS_GROUP_CSCG_HIER and click on Activate DataSource button.

Step 3: Post Process of DataSource or Transporting the DataSource.

Go to TCode : RSA6 of Source system (R/3)

Select the DataSource and click on DataSource Transport (CTRL+SHIFT+F6) button.

Transporting DataSources
Select the DataSources that you want to transport from the Test system into the productive system, and choose Transport. Specify a development class and a transport request, so that the DataSources can be transported.

Collect the DataSource in Transport Request

Click on OK button to save it in the Transport Request.

**Step 4: Extractor Checker TCode: RSA3**

To check the Data for the above DataSource Go to TCode : RSA3 (Extractor Checker).

Specify the Hierarchy name:

Click on Extraction button or Execute ( F8)

Display the Data:

4
**Step 5: Replicate the DataSource in BI**

**SAP BI Steps**

Logon to BI system and Replicate the DataSource

<table>
<thead>
<tr>
<th>DataSources for [Enter User Name] Client 200</th>
<th>Tech. Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP</td>
<td>SAP</td>
</tr>
<tr>
<td>SAP Application Components</td>
<td>SAP-R/3</td>
</tr>
<tr>
<td>Application Components</td>
<td>SAP-R/3</td>
</tr>
<tr>
<td>Consolidation</td>
<td>EC-CS</td>
</tr>
<tr>
<td>Consolidation Master Data</td>
<td>EC-CS-1O</td>
</tr>
<tr>
<td>Consolidation Transaction Data</td>
<td>EC-CS_1A</td>
</tr>
<tr>
<td>Consolidation Transaction Data</td>
<td>EC-CS_1R</td>
</tr>
</tbody>
</table>

DataSource will be replicated in BI system

The Structure of the DataSource is:-
Step 7: Activate the DataSource

Activate the DataSource in BI

Step 8. Activate the relevant Business Content in BI.

Activate the InfoObject (0CS_GROUP and 0CS_DIMEN) in BI system TCode: RSOR which has the following Structure.

0CS_DIMEN

0CS_GROUP.
**Display Characteristic 0CS_GROUP: Details**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>0CS_GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long description</td>
<td>Consolidation Group</td>
</tr>
<tr>
<td>Short description</td>
<td>Cons Group</td>
</tr>
<tr>
<td>Version</td>
<td>Content</td>
</tr>
<tr>
<td>Object Status</td>
<td>Active, executable</td>
</tr>
</tbody>
</table>

**Dictionary**

- **Data element**: /BDS/0CS_GROUP
- **Data Type**: CHAR - Character String
- **Length**: 18
- **Lowercase letters**: False
- **Convers. Rout.**: ALPHA
- **Output length**: 18
- **SID table**: /BDS/0CS_GROUP

**Transfer Routine**

- **Transfer routine exists**: False

**Last change**

- **By**: SAP
- **On**: 14.04.1999 14:32:39

**Hierarchy is Time – Dependent and Version Dependent**
Hierarchy Table structure will be (/BI0/H*)

Dictionary: Display Table

As the Characteristic is an InfoSource with Direct Update, it means it is a Master data InfoSource which need to be assign to an application Component. The characteristic then appears in the InfoSource tree of the Administrator Workbench. From there, you can assign the DataSource and Source System to the characteristic. You can then load master data, texts and hierarchies for the characteristic.

These are the cases in which it is not possible to make an InfoObject a master data InfoSource:

The characteristic is a 0SOURSYSTEM (source system ID)
The characteristic has neither master data nor texts, nor hierarchies.
It is not a characteristic, but a unit or a key figure.

To generate an export DataSource for a characteristic, the characteristic must also be a master data InfoSource - meaning, it must be assigned to an application component.

**Step 9: Create Transfer Rules.**

Create the Transfer Rules for the Consolidation Group (Hierarchies).

Right click on the Consolidation Group (Hierarchies) and in Additional Functions -> Create Transfer Rules.

**Step 10: Assign Source System**

Assign the Source System

Assign the DataSource
Step 11: Activate the InfoSource

Create the InfoPackage

Step 12: Create Infopackage

Create the InfoPackage

Right click on DataSource -> Create InfoPackage
**Step 13: Select DataSource and Save Infopackage**

Provide the Description and Select the Consolidated Entity Hierarchy

Save the Infopackage.

In the infopackage -> Hierarchy Selection tab you see list of Hierarchies which has been created in R/3. Select the Hierarchy which you would like to Load.

Click on Execute button on Scheduler Tab.
Step 14: Execute Infopackage

TCode: RSHIER

Output Results of Hierarchy loaded from R/3
## Related Content

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<tr>
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<td>For more information, visit the Business Intelligence homepage.</td>
<td></td>
</tr>
</tbody>
</table>
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