

IBM Tivoli Monitoring for Applications: mySAP.com Warehouse Enablement Pack Implementation Guide

Version 1.1.0

Edition notice

Second Edition

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1 About this document

This document was revised on November 11, 2002, to correct technical and formatting consistency edits.

This document describes the warehouse enablement pack for IBM® Tivoli® Monitoring for Applications, Version 5.1.0: mySAP.com. It covers the following topics:

- Installing and configuring the warehouse pack
- The data flow and data structures used by the warehouse pack

With this warehouse pack you can load data into the Tivoli central data warehouse that is extracted from an IBM Tivoli Monitoring middle layer repository. In addition, the cleansed historical data is used to populate a data mart for reporting on the mySAP.com components.

1.1 Related Documentation

You can access many Tivoli publications online using the Tivoli Information Center, which is available on the Tivoli Customer Support Web site:

<http://www.tivoli.com/support/documents/>

1.1.1 IBM Tivoli Monitoring for Applications: mySAP.com

The following IBM Tivoli Monitoring for Applications: mySAP.com documents are available on the IBM Tivoli Monitoring for Applications: mySAP.com documentation CD:

- *IBM Tivoli Monitoring for Applications: mySAP.com, Version 5.1.0 User's Guide*, SC23-4812
Provides information about how to manage mySAP.com resources with IBM Tivoli Monitoring for Applications: mySAP.com.
- *IBM Tivoli Monitoring for Applications: mySAP.com, Version 5.1.0 Reference Guide*, SC23-4813
Provides information about the IBM Tivoli Monitoring for Applications: mySAP.com resource models, tasks, and commands.
- *IBM Tivoli Monitoring for Applications, Version 5.1.0: Installation and Setup Guide*, GC23-4810
Provides information about installing the IBM Tivoli Monitoring for Applications, Version 5.1.0 product.
- *IBM Tivoli Monitoring for Applications: Release Notes*, GI11-0941
Provides information about system requirements and specific information related to each component of the IBM Tivoli Monitoring for Applications, Version 5.1.0 product.
- *IBM Tivoli Monitoring for Applications: mySAP.com Limitations and Workarounds Supplement*, SC23-4811
Provides late-breaking information about the defects, limitations, and workarounds related to IBM Tivoli Monitoring for Applications: mySAP.com. You can access the Limitations and Workarounds document through the IBM Tivoli Monitoring for Applications: mySAP.com link on the Tivoli Information Center Web site:

http://www.tivoli.com/support/public/Prodman/public_manuals/td/TD_PROD_LIST.html

1.1.2 Tivoli Enterprise Data Warehouse

The following Tivoli Enterprise™ Data Warehouse documents are available on the Tivoli Enterprise Data Warehouse Documentation CD:

- *Tivoli Enterprise Data Warehouse Release Notes*, GI11-0857
Provides late-breaking information about Tivoli Enterprise Data Warehouse and lists hardware requirements and software prerequisites.
- *Installing and Configuring Tivoli Enterprise Data Warehouse*, GC32-0744

Describes how Tivoli Enterprise Data Warehouse fits into your enterprise, explains how to plan for its deployment, and gives installation and configuration instructions. It provides an introduction to the built-in program for creating and running reports, and contains maintenance procedures and troubleshooting information.

- *Enabling an Application for Tivoli Enterprise Data Warehouse*, GC32-0745

Provides information about connecting an application to Tivoli Enterprise Data Warehouse. This book is for application programmers who use Tivoli Enterprise Data Warehouse to store and report on their application's data, data warehousing experts who import Tivoli Enterprise Data Warehouse data into business intelligence applications, and customers who use their local data in the warehouse.

1.1.3 DB2

The DB2 library contains important information about the database and data warehousing technology provided by IBM DB2, DB2 Data Warehouse Center, and DB2 Warehouse Manager. Refer to the DB2 library for help in installing, configuring, administering, and troubleshooting DB2. The DB2 library is available on the Tivoli Customer Support Web site. After you install DB2, its library is also available on your system.

The following DB2 documents are particularly relevant for people working with Tivoli Enterprise Data Warehouse:

- *IBM DB2 Universal Database for Windows Quick Beginnings*, GC09-2971
Guides you through the planning, installation, migration (if necessary), and setup of a partitioned database system using the IBM DB2 product on Microsoft Windows.
- *IBM DB2 Universal Database for UNIX Quick Beginnings*, GC09-2970
Guides you through the planning, installation, migration (if necessary), and setup of a partitioned database system using the IBM DB2 product on UNIX.
- *IBM DB2 Universal Database Administration Guide: Implementation*, SC09-2944
Covers the details of implementing your database design. Topics include creating and altering a database, database security, database recovery, and administration using the Control Center, a DB2 graphical user interface.
- *IBM DB2 Universal Database Data Warehouse Center Administration Guide*, SC26-9993
Provides information on how to build and maintain a data warehouse using the Data Warehouse Center.
- *IBM DB2 Warehouse Manager Installation Guide*, GC26-9998
Provides the information to install the following Warehouse Manager components: Information Catalog Manager, warehouse agents, and warehouse transformers.
- *IBM DB2 Universal Database and DB2 Connect Installation and Configuration Supplement*, GC09-2957
Provides advanced installation considerations and guides you through the planning, installation, migration (if necessary), and set up a platform-specific DB2 client. Once the DB2 client is installed, you then configure communications for both the client and server, using the DB2 GUI tools or the Command Line Processor. This supplement also contains information on binding, setting up communications on the server, the DB2 GUI tools, DRDA™ AS, distributed installation, the configuration of distributed requests, and accessing heterogeneous data sources.
- *IBM DB2 Universal Database Message Reference Volume 1*, GC09-2978 and *IBM DB2 Universal Database Message Reference Volume 2*, GC09-2979
Lists the messages and codes issued by DB2, the Information Catalog Manager, and the Data Warehouse Center, and describes the actions you should take.

2 Overview

The following sections provide an overview of Tivoli Enterprise Data Warehouse and the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com warehouse pack.

2.1 Overview of Tivoli Enterprise Data Warehouse

Tivoli Enterprise Data Warehouse provides the infrastructure for the following:

- Extract, transform, and load (ETL) processes through the IBM DB2 Data Warehouse Center tool
- Schema generation of the central data warehouse
- Report interfaces

As shown in Figure 1, Tivoli Enterprise Data Warehouse consists of a centralized data store where historical data from many management applications can be stored, aggregated, and correlated.

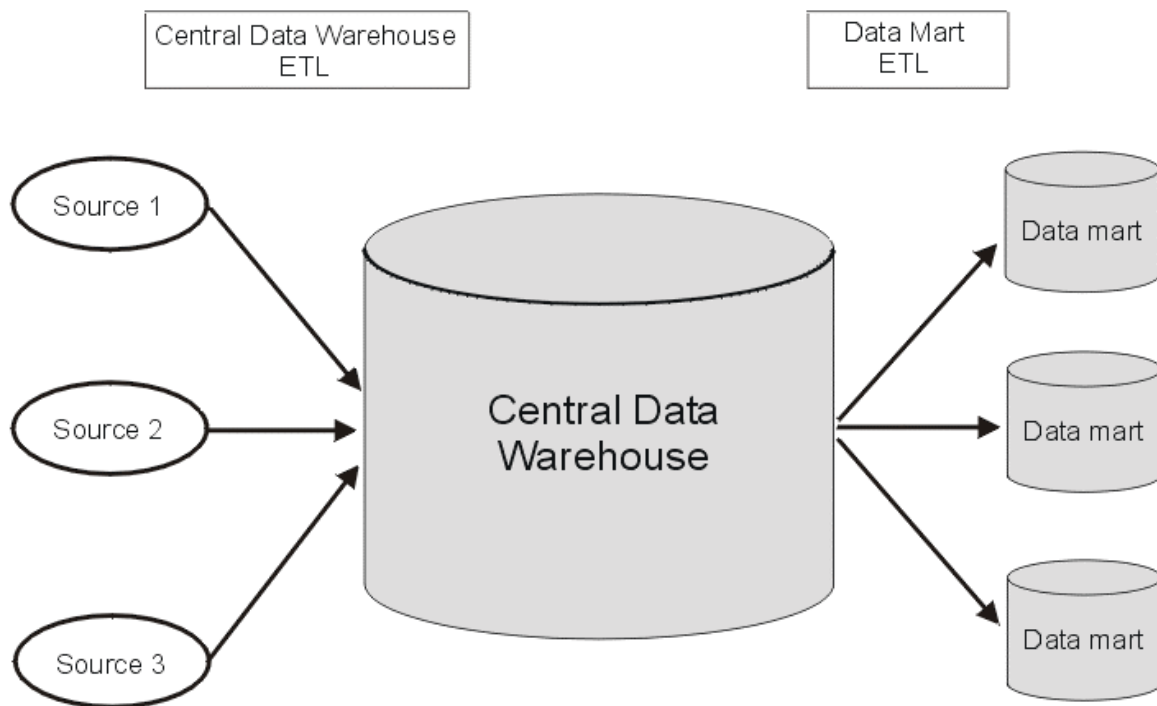


Figure 1. Tivoli Enterprise Data Warehouse overview

The *central data warehouse* uses a generic schema. As new components or new applications are added, more data is added to the database; however, no new tables or columns are added in the schema.

A *data mart* is a subset of a data warehouse that contains data tailored and optimized for the specific reporting needs of a department or team.

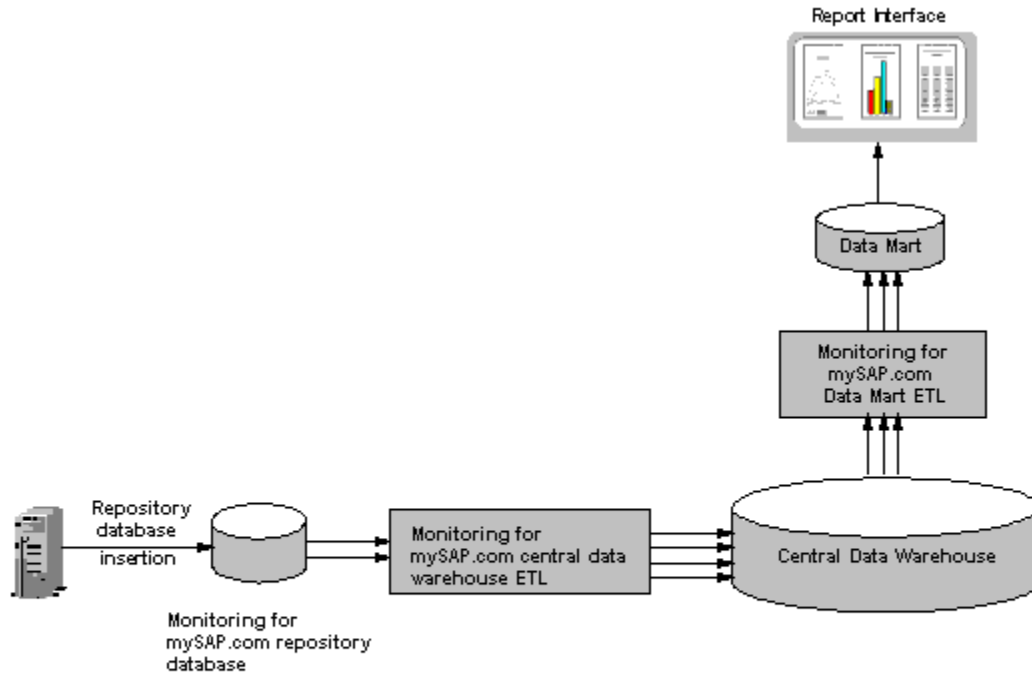
The *central data warehouse ETL* reads the data from the operational data stores of the application that collects it, verifies the data, makes the data conform to the schema, and places the data into the central data warehouse.

The *data mart ETL* extracts a subset of data from the central data warehouse, transforms it, and loads it into one or more star schemas, which can be included in data marts to answer specific business questions.

A program that provides these ETLs is called a *warehouse enablement pack*, or *warehouse pack*.

2.2 Overview of IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com

The warehouse pack for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com provides metadata to enable the central data warehouse ETL to load data into the Tivoli central data warehouse for mySAP.com. The IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com collector collects data from mySAP.com. The data is then uploaded to a repository database where it is inserted into the central data warehouse.



3 Installing and Configuring

The following sections provide information about installing and configuring the warehouse pack for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com.

3.1 Prerequisites

Before installing the warehouse pack for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com, the following software must be installed:

- IBM DB2 Universal Database Enterprise Edition Version 7.2
- IBM DB2 Universal Database Enterprise Edition Version 7.2 Fixpak 6
- Tivoli Enterprise Data Warehouse required e-fixes to IBM DB2 UDE v7 FixPak 6 (1.1-TDW-0002)
- Tivoli Enterprise Data Warehouse Version 1.1
- Tivoli Enterprise Data Warehouse 1.1 Fix Pack 1 (1.1-TDW-FP01a)
- Tivoli Enterprise Data Warehouse 1.1 E-fix 2 (1.1-TDW-0005E)

Note: Tivoli Enterprise Data Warehouse 1.1 Fix Pack 2 (1.1-TDW-FP02) supersedes e-fix 1.1-TDW-0005E. When 1.1-TDW-FP02 becomes available, install 1.1-TDW-FP02 instead of 1.1-TDW-0005E.

You can obtain the Tivoli Enterprise Data Warehouse e-fixes and fix pack from the Tivoli Enterprise Data Warehouse Web site (<http://www.ibm.com/software/sysmgmt/products/support/TivoliEnterpriseDataWarehouse.html>). Click the Downloads link in the Self help section.

3.2 Supported hardware and software

The IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com Warehouse Pack, Version 5.1.0, supports IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com and the version of DB2 database products that are documented in the "Installation and Upgrade Notes" section of the *IBM Tivoli Monitoring 5.1.1 Release Notes*, GI10-5797-01.

3.3 Limitations

If you need to install any warehouse packs with a different user ID (for example, db2) than the user ID used for installing the Tivoli Enterprise Data Warehouse core functionality (for example, db2admin), you must first create a user temporary tablespace in the TWH_CDW database and TWH_MART database for that specific user. To do this, use the following sequence of commands:

```
db2 "connect to TWH_CDW user <install_user> using <password>"
db2 "create user temporary tablespace usertmp2 managed by system using ('usertmp2')"
db2 "connect to TWH_MART user <install_user> using <password>"
db2 "create user temporary tablespace usertmp3 managed by system using ('usertmp3')"
```

The reason you must create temporary tablespaces is because during the Tivoli Enterprise Data Warehouse core installation, a user temporary tablespace is created by the initial user (for example, db2admin) that can only be used by that user. Installing a warehouse pack with a different user (for example, db2) will fail because it cannot access the user temporary tablespace created by the initial user.

3.4 Database sizing considerations

Ensure that you have sufficient space in the central data warehouse database for the historical data collected by this warehouse pack. To estimate how much space is required for the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com warehouse pack, complete the following worksheets for the central data warehouse database and data mart database.

3.4.1 Central data warehouse database (TWH_CDW)

The following worksheet estimates the required space in MB for the historical mySAP.com data. This estimate is based on the number of inserted mySAP.com Servers into the central data warehouse database and on how many days these components' measurements are stored. This estimate is increased by 20% to accommodate staging tables and temporary tables.

IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com	
Tables	Space
TWG.Comp	$\langle \text{number of mySAP.com Servers} \rangle * 567600$
TWG.Msmt	$\langle \text{number of mySAP.com Servers} \rangle * \langle \text{num_days} \rangle * 1920000$
TWG.CompReln	$\langle \text{number of mySAP.com Servers} \rangle * 126000$
Total	ΣSpace

Estimate database size in megabytes	$(\Sigma \text{Space}) * 1.2 / 1024000$
-------------------------------------	---

In the following example, 675.81 MB is estimated for storing component information and 300 days of measurement information for a single mySAP.com Application server.

IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com	
Tables	Space
TWG.Comp	567600
TWG.Msmt	576000000
TWG.CompReln	126000
Total	576693600

Estimate database size in megabytes	675.81
-------------------------------------	--------

3.4.2 Data mart database (TWH_MART)

The following example shows an estimate of the required space in MB for the extracted mySAP.com data. This estimate is based on the number of inserted mySAP.com Servers into the data mart database and on how many days these components' fact measurements are stored. This estimate is increased by 20% to accommodate staging tables and temporary tables.

IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com	
Tables	Space
Component dimension	$\langle \text{number of mySAP.com Servers} \rangle * 180000$
Component metric	$\langle \text{number of mySAP.com Servers} \rangle * 34200$
Fact:	
Hourly	$\langle \text{number of mySAP.com Servers} \rangle * \langle \text{num_days} \rangle * 1248000$
Daily	$\langle \text{number of mySAP.com Servers} \rangle * \langle \text{num_days} \rangle * 52000$
Weekly	$\langle \text{number of mySAP.com Servers} \rangle * \langle \text{num_days} \rangle * 7500$

Monthly	$\langle \text{number of mySAP.com Servers} \rangle * \langle \text{num_days} \rangle * 1900$
Total	ΣSpace

Estimate database size in megabytes	$(\Sigma \text{Space}) * 1.2 / 1024000$
--	---

In the following example, 141.38 MB is estimated for storing component information and 90 days of fact information in the hourly and weekly tables and 300 days of fact information in the weekly and monthly tables. The estimate is based on a single mySAP.com Application server.

IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com	
Tables	Space
Component dimension	180000
Component metric	34200
Fact:	
Hourly	112320000
Daily	4680000
Weekly	2737500
Monthly	693500
Total	120645200

Estimate database size in megabytes	141.38
--	--------

3.5 Data sources and targets

The TWH_CDW and TWH_MART ODBC system data source names, which are created during Tivoli Enterprise Data Warehouse installation, are used to access the ABH_TWH_Mart_Source data source and the ABH_TWH_CDW_Target , ABH_TWH_MART_Target and the ABH_TWH_MD_Target target sources specific to the warehouse pack for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com.

3.6 Installation procedure

1. Make sure that all prerequisite product patches are applied.
2. Make sure that Tivoli Enterprise Data Warehouse and Fix Pack 1 are installed. For instructions about installing Tivoli Enterprise Data Warehouse, refer to the *Installing and Configuring Tivoli Enterprise Data Warehouse* document.
3. Install the warehouse pack as described in the instructions in the *Installing and Configuring Tivoli Enterprise Data Warehouse* document. Note: The installation media for this warehouse pack is located on the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com Component Software CD in the /tedw_apps_etl/abh directory.

3.7 Post-installation steps

Through the IBM DB2 Data Warehouse Center, update the user ID and password for the *ABH_TWH_MART_Source* and *ABH_TWH_REPOSITORY_Source* data sources and the *ABH_TWH_CDW_Target*, *ABH_TWH_MART_Target* and *ABH_TWH_MD_Target* target sources. The procedures for updating warehouse sources and targets are documented in *Installing and Configuring Tivoli Enterprise Data Warehouse*.

4 Maintaining

The following sections describe how to maintain the mySAP.com data collected in the Tivoli central data warehouse database

4.1 Backing up and restoring

Because this warehouse pack does not create any tables in the IBM Tivoli Monitoring middle-layer repository, no additional backup of this database or any special precautions are required before running the provided warehouse processes.

4.2 Pruning

4.2.1 Central data warehouse database (TWH_CDW)

Pruning data from the measurement (Msmnt) table is implemented with a combination of triggers and the *CDW_C05_Prune_Msmnt_Process* warehouse process. Schedule how often you want the *CDW_C05_Prune_Msmnt_Process* warehouse process to run (for example, weekly or monthly). The prune measurement control table (*Prune_Msmnt_Control*) governs what data is pruned. By default, all mySAP.com data older than three months is pruned when the *CDW_C05_Prune_Msmnt_Process* warehouse process is executed.

To modify the default date duration value, run the following SQL statement, where *X* is a date duration in the format *yyyymmdd* (for example, *X* = 00000108, which represents 0000 years, 01 months, 08 days).

```
UPDATE TWG.Prune_Msmnt_Control
SET PMSMTC_AGE_IN_DAYS = X
WHERE TMSUM_CD = 'H'
AND MSRC_CD = 'ABH'
```

4.2.2 Data mart database (TWH_MART)

Pruning data from the mySAP.com fact tables is implemented in the *buildMart* warehouse process steps. The prune mart control table (*Prune_Mart_Control*) governs what data is pruned and contains a date duration value for every mySAP.com fact table. By default, all hourly and daily fact data older than three months is pruned when the *buildMart* process steps run. All weekly and monthly fact data older than one year is pruned.

To modify the default date duration value for any of the mySAP.com fact tables, run the following SQL statement, where *X* is a date duration in the format *yyyymmdd* (for example, *X* = 00000108, which represents 0000 years, 01 months, 08 days) and *table_name* is the appropriate mySAP.com fact table name.

```
UPDATE ABH.Prune_Mart_Control
SET PMARTC_DURATION = X
WHERE TABLE_NAME = 'table_name'
```

5 ETL processes

This warehouse pack has the following processes.

5.1 ABH_c05_s010_extract_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c05_s010_extract

This step extracts data from the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database table r3_progresp and places it in staging tables.

5.2 ABH_c05_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c05_s050_load

This step inserts data from the staging table created in ABH_c05_s010_extract_Process into the central data warehouse.

5.3 ABH_c10_s010_extract_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c10_s010_extract

This step extracts data from the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database table r3_disk.

5.4 ABH_c10_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c10_s010_load

This step inserts data from the staging table created in ABH_c10_s010_extract_Process into the Tivoli Enterprise Data Warehouse.

5.5 ABH_c15_s010_extract_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c15_s010_extract

This step extracts data from the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database table r3_cpu.

5.6 ABH_c15_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c15_s010_load

This step inserts data from the staging table created in ABH_c15_s010_extract_Process into the Tivoli Enterprise Data Warehouse.

5.7 ABH_c20_s010_extract_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c20_s010_extract

This step extracts data from the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database table r3_tx_sla.

5.8 ABH_c20_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c20_s010_load

This step inserts data from the staging table created in ABH_c20_s010_extract_Process into the Tivoli Enterprise Data Warehouse.

5.9 ABH_c25_s010_extract_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c25_s010_extract

This step extracts data from the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database tables r3_avail and r3_user_sum.

5.10 ABH_c25_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c25_s010_load

This step inserts data from the staging table created in ABH_c25_s010_extract_Process into the Tivoli Enterprise Data Warehouse.

5.11 ABH_c30_s010_extract_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c30_s010_extract

This step extracts data from the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database table r3_application.

5.12 ABH_c30_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c30_s010_load

This step inserts data from the staging table created in ABH_c30_s010_extract_Process into the Tivoli Enterprise Data Warehouse.

5.13 ABH_c35_s010_extract_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c35_s010_extract

This step extracts data from the IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database table r3_lan.

5.14 ABH_c35_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c35_s010_load

This step inserts data from the staging table created in ABH_c35_s010_extract_Process into the Tivoli Enterprise Data Warehouse.

5.15 ABH_c40_s050_load_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_c40_s010_load

This step inserts data from the staging table created in ABH_c35_s010_extract_Process into the Tivoli Enterprise Data Warehouse.

5.16 ABH_m05_s010_buildMart_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_m05_s010_buildMart

This step extracts data from the Tivoli Enterprise Data Warehouse into the mySAP.com Data Mart

- ABH_m05_s010_buildMart_rollup

This step aggregates the hourly data to the daily, weekly and monthly levels

5.17 ABH_m10_s010_buildMart_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_m10_s010_buildMart

This step extracts data from the Tivoli Enterprise Data Warehouse into the mySAP.com Data Mart

- ABH_m10_s010_buildMart_rollup

This step aggregates the hourly data to the daily, weekly and monthly levels

5.18 ABH_m15_s010_buildMart_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_m15_s010_buildMart

This step extracts data from the Tivoli Enterprise Data Warehouse into the mySAP.com Data Mart

- ABH_m15_s010_buildMart_rollup

This step aggregates the hourly data to the daily, weekly and monthly levels

5.19 ABH_m20_s010_buildMart_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_m20_s010_buildMart

This step extracts data from the Tivoli Enterprise Data Warehouse into the mySAP.com Data Mart

- ABH_m20_s010_buildMart_rollup

This step aggregates the hourly data to the daily, weekly and monthly levels

5.20 ABH_m25_s010_buildMart_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_m25_s010_buildMart

This step extracts data from the Tivoli Enterprise Data Warehouse into the mySAP.com Data Mart

- ABH_m25_s010_buildMart_rollup

This step aggregates the hourly data to the daily, weekly and monthly levels

5.21 ABH_m35_s010_buildMart_Process

This process extracts data from the target database into the central data warehouse for IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com. This process is run daily.

This process has the following steps:

- ABH_m35_s010_buildMart

This step extracts data from the Tivoli Enterprise Data Warehouse into the mySAP.com Data Mart

- ABH_m35_s010_buildMart_rollup

This step aggregates the hourly data to the daily, weekly and monthly levels

6 Generic schema implementation

Before reading this section, read about the generic schema for the Tivoli Enterprise Data Warehouse central data warehouse, which is described in *Enabling an Application for Tivoli Enterprise Data Warehouse*. That document defines the content of each table and explains the relationships between the tables in this document.

Shaded columns in the following tables are translated by the application. Translated columns are also indicated by an asterisk (*) after the column name.

6.1 Component configuration

6.1.1 Component type (table CompTyp)

CompTyp_Cd CHAR(17)	CompTyp_Parent_Cd CHAR(17)	CompTyp_Nm * VARCHAR(120)	CompTyp_Strt_DtTm TIMESTAMP	CompTyp_End_DtTm TIMESTAMP
ABH_SYSTEM	NULL	mySAP.com System	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
IP_HOST	NULL	IP Host	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_OS_DATA	NULL	mySAP.com OS data	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_SERVER	NULL	mySAP.com Server	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_USER	NULL	mySAP.com User	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_TASKTYPE	NULL	mySAP.com Task type	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_TRANSACTION	NULL	mySAP.com Transaction code	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_PROGRAM	NULL	mySAP.com Program	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_NETWORK_CARD	NULL	mySAP.com Network card	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_DISK	NULL	mySAP.com Disk	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_APPLAREA	NULL	mySAP.com Application area	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_APPLNAME	NULL	mySAP.com Application name	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000

6.1.2 Component (table Comp)

Comp_ID INTEGER	CompTy p_Cd CHAR (17)	Centr _Cd CHAR (6)	Cust_ID INTEGER	Comp_ Corr_ID INTEGER	Comp_ Nm VARCHAR (254)	Comp_Corr _Val VARCHAR (254)	Comp_Strt_ DtTm TIMESTAMP	Comp_End_ DtTm TIMESTAMP	Comp_Ds VARCHAR (254)
1	ABH_SY STEM	CDW	1		D01_aki ta		2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
2	IP_HOST	CDW	1		Akita.rtp .lab.tivol i.com	D01_akita	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
3	ABH_OS _DATA	CDW	1		OS Data	Akita.rtp.lab.t ivoli.com	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
4	ABH_SE RVER	CDW	1		D01_aki ta_10	Akita.rtp.lab.t ivoli.com	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
5	ABH_US ER	CDW	1		Millert	100	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
6	ABH_TAS KTYPE	CDW	1		D	Millert	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
7	ABH_TR ANSACTI ON	CDW	1		AL08	D	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
8	ABH_PR OGRAM	CDW	1		RSSTA T20	Millert	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
9	ABH_NE TWORK_ CARD	CDW	1		En1	Akita.rtp.lab.t ivoli.com	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
10	ABH_DIS K	CDW	1		HDISK0	Akita.rtp.lab.t ivoli.com	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
11	ABH_AP PLAREA	CDW	1		SD	D01_akita_1 0	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	
12	ABH_AP PLNAME	CDW	1		SD-SLS SD – Sales	SD	2002-01-30- 09.10.00000 0	9999-01-01- 12.00.00.000 000	

6.1.3 Component relationship type (table ReInTyp)

ReInTyp_Cd CHAR(6)	ReInTyp_Nm * VARCHAR(120)
RUNSON	Runs on
INVOKE	Invokes
PCHILD	PARENT-CHILD

6.1.4 Component relationship rule (table ReInRul)

CompTyp_Source_Cd CHAR(17)	CompTyp_Target_Cd CHAR(17)	ReInTyp_Cd CHAR(6)	ReInRul_Strt_DtTm TIMESTAMP	ReInRul_End_DtTm TIMESTAMP
ABH_SYSTEM	IP_HOST	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_SERVER	IP_HOST	RUNSON	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
IP_HOST	ABH_SERVER	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
IP_HOST	ABH_OS_DATA	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_SERVER	ABH_USER	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_USER	ABH_TASKTYPE	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_TASKTYPE	ABH_TRANSACTION	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_USER	ABH_PROGRAM	INVOKE	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_USER	ABH_PROGRAM	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
IP_HOST	ABH_NETWORK_CARD	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
IP_HOST	ABH_DISK	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_SYSTEM	ABH_APPLAREA	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_SYSTEM	ABH_APPLNAME	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_APPLAREA	ABH_APPLNAME	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000
ABH_TRANSACTION	ABH_APPLNAME	PCHILD	2002-01-30-09.10.000000	9999-01-01-12.00.00.000000

6.1.5 Component relationship (table CompReIn)

CompReIn_ID INTEGER	Comp_Source_ID INTEGER	Comp_Target_ID INTEGER	ReInTyp_Cd CHAR(6)	CompReIn_Strt_ DtTm TIMESTAMP	CompReIn_End_Dt Tm TIMESTAMP
1	1	2	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
2	2	3	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
3	2	4	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
4	4	5	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
5	5	6	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
6	6	7	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
7	5	8	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
8	3	9	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
9	3	10	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
10	1	11	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
11	11	12	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
12	12	7	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000
13	1	12	PCHILD	2002-01-30- 09.10.000000	9999-01-01- 12.00.00.000000

6.1.6 Attribute type (table AttrTyp)

AttrTyp_Cd CHAR(17)	AttrTyp_Nm * VARCHAR(120)

6.1.7 Attribute rule (table AttrRul)

CompTyp_Cd CHAR(17)	AttrTyp_Cd * CHAR(17)	AttrRul_Strt_ DtTm TIMESTAMP	AttrRul_End _DtTm TIMESTAMP	AttrRul_Dom_Ind CHAR

6.1.8 Attribute domain (table AttrDom)

AttrDom_ID INTEGER	CompTyp_Cd CHAR(17)	AttrTyp_Cd CHAR(17)	AttrDom_Strt_DtTm TIMESTAMP	AttrDom_End_DtTm TIMESTAMP	AttrDom_Val VARCHAR(254)	AttrDom_Ds VARCHAR(254)

6.1.9 Component attribute (table CompAttr)

CompAttr_ID INTEGER	Comp_ID INTEGER	AttrTyp_Cd CHAR(17)	CompAttr_Strt_DtTm TIMESTAMP	CompAttr_End_DtTm TIMESTAMP	CompAttr_Val VARCHAR(254)

6.2 Component measurement

6.2.1 Measurement group type (table MGrpTyp)

MGrpTyp_Cd CHAR(6)	MGrpTyp_Nm * VARCHAR(120)
CATEG	Category
GROUP	Aggregate Types or Group Functions
STATE	State
ABH1	mySAP.com Performance
ABH2	mySAP.com CPU/network card/disk

6.2.2 Measurement group (table MGrp)

MGrp_Cd CHAR(6)	MGrpTyp_Cd CHAR(6)	MGrp_Parent_Cd CHAR(6)	MGrp_Nm * VARCHAR(120)
ABHLOG	STATE	NULL	Logon able state group
TRANS	ABH1	NULL	mySAP.com Transaction
PROG	ABH1	NULL	mySAP.com Program
SLA	ABH1	NULL	mySAP.com SLA
APPL	ABH1	NULL	mySAP.com Application group
DISK	ABH2	NULL	mySAP.com Disk
NETWRK	ABH2	NULL	MySAP.com Network card
CPU	ABH2	NULL	mySAP.com CPU
AVG_E	GROUP	NULL	Average value exists
MAX_E	GROUP	NULL	Maximum value exists
TOT_E	GROUP	NULL	Total value exists

6.2.3 Measurement group member (table MGrpMbr)

MGrp_Cd CHAR(6)	MGrpTyp_Cd CHAR(6)	MsmtTyp_ID INTEGER
AVG_E	GROUP	1
AVG_E	GROUP	2
AVG_E	GROUP	3
AVG_E	GROUP	4
AVG_E	GROUP	5
AVG_E	GROUP	6
AVG_E	GROUP	7
AVG_E	GROUP	8
AVG_E	GROUP	9
AVG_E	GROUP	10
AVG_E	GROUP	11
AVG_E	GROUP	12
AVG_E	GROUP	13
AVG_E	GROUP	14
AVG_E	GROUP	15
AVG_E	GROUP	16
AVG_E	GROUP	17
AVG_E	GROUP	18
AVG_E	GROUP	22
AVG_E	GROUP	23
AVG_E	GROUP	28
AVG_E	GROUP	29
AVG_E	GROUP	30
AVG_E	GROUP	33
TOT_E	GROUP	19
TOT_E	GROUP	20
TOT_E	GROUP	21
TOT_E	GROUP	24
TOT_E	GROUP	25
TOT_E	GROUP	26
TOT_E	GROUP	27
TOT_E	GROUP	31

MGrp_Cd CHAR(6)	MGrpTyp_Cd CHAR(6)	MsmTyp_ID INTEGER
TOT_E	GROUP	32
TRANS	ABH1	1
TRANS	ABH1	2
TRANS	ABH1	3
TRANS	ABH1	4
TRANS	ABH1	5
TRANS	ABH1	6
TRANS	ABH1	7
TRANS	ABH1	8
TRANS	ABH1	9
TRANS	ABH1	10
TRANS	ABH1	11
TRANS	ABH1	28
TRANS	ABH1	31
PROG	ABH1	1
PROG	ABH1	2
PROG	ABH1	3
PROG	ABH1	4
PROG	ABH1	6
PROG	ABH1	7
PROG	ABH1	8
PROG	ABH1	9
PROG	ABH1	11
PROG	ABH1	32
SLA	ABH1	28
DISK	ABH2	15
DISK	ABH2	16
DISK	ABH2	17
DISK	ABH2	18
NETWRK	ABH2	19
NETWRK	ABH2	20
NETWRK	ABH2	21
NETWRK	ABH2	22

MGrp_Cd CHAR(6)	MGrpTyp_Cd CHAR(6)	MsmTyp_ID INTEGER
NETWRK	ABH2	23
CPU	ABH2	12
CPU	ABH2	13
CPU	ABH2	14
CPU	ABH2	33
ABHLOG	STATE	29
ABHLOG	STATE	30

6.2.4 Measurement unit category (table MUnitCat)

MunitCat_Cd CHAR(6)	MunitCat_Nm * VARCHAR(120)
TM	Time Duration
QTY	Quantity
PRC	Percentage
AVG	Average

6.2.5 Measurement unit (table MUnit)

MUnit_Cd CHAR(6)	MUnitCat_Cd CHAR(6)	Munit_Nm * VARCHAR(120)
MSec	TM	Milliseconds
PRC	PRC	Percentage
KB	QTY	kilobytes
AVG	AVG	Average
QTY	QTY	Quantity

6.2.6 Time summary (table TmSum)

TmSum_Cd CHAR	TmSum_Nm * VARCHAR(120)
H	Hourly
D	Daily
W	Weekly
M	Monthly

6.2.7 Measurement source (table MSrc)

MSrc_Cd CHAR(6)	MSrc_Parent_Cd CHAR(6)	MSrc_Nm * VARCHAR(120)
Tivoli	NULL	Tivoli Application
ABH	Tivoli	IBM Tivoli Monitoring for Applications – mySAP.com

6.2.8 Measurement type (table MsmtTyp)

MsmtTyp_ID INTEGER	MUnit_Cd CHAR(6)	MSrc_Cd CHAR (6)	MsmtTyp_Nm * VARCHAR(120)	MsmtTyp_Ds * VARCHAR(254)
1	MSec	ABH	CPU time	The amount of time it took the CPU to process the task
2	MSec	ABH	Response time	The amount of time it took the task to complete
3	MSec	ABH	Database time	The amount of time it took the database to process the task
4	KB	ABH	KB transferred	The amount of kilobytes transferred by the task
5	MSec	ABH	GUI time	The amount of time used by GUI operations
6	KB	ABH	KB changed	The amount of kilobytes changed by the task
7	MSec	ABH	Wait time	The amount of time the task waited to be processed
8	KB	ABH	Memory used	The amount of memory used by the task
9	MSec	ABH	Load time	The load time of the task
10	MSec	ABH	GUI network time	The amount of time used by the GUI in network communications
11	MSec	ABH	Other time	The amount of time used by the task to complete that is not accounted for in the other sub components
12	MSec	ABH	System CPU	The amount of CPU used by the system
13	MSec	ABH	User CPU	The amount of CPU used by users
14	MSec	ABH	Idle CPU	The amount of time the CPU was idle
15	MSec	ABH	Queue length	Disk queue length
16	MSec	ABH	Service time	Disk service time
17	MSec	ABH	Disk wait time	Disk wait time
18	PRC	ABH	Disk utilization	Disk utilization
19	QTY	ABH	Collisions	Network card collisions
20	QTY	ABH	In errors	Network card in errors
21	QTY	ABH	Out errors	Network card out errors
22	AVG	ABH	Packets in	Network card packets in
23	AVG	ABH	Packets out	Network card packets out
24	QTY	ABH	Users	Number of users logged in
25	QTY	ABH	Sessions	Number of user sessions
26	QTY	ABH	Logins	Logins
27	QTY	ABH	Active users	Number of active users
28	PRC	ABH	Within SLA	Within SLA
29	PRC	ABH	Logon able	Logon able
30	PRC	ABH	Not logon able	Not logon able

MsmTyp_ID INTEGER	MUnit_Cd CHAR(6)	MSrc_Cd CHAR (6)	MsmTyp_Nm * VARCHAR(120)	MsmTyp_Ds * VARCHAR(254)
31	QTY	ABH	Dialog count	Number of dialog steps
32	QTY	ABH	Program count	Number of times a program executes
33	MSec	ABH	Total CPU	The amount of CPU used by the system and users

6.2.9 Component measurement rule (table MsmRul)

CompTyp_Cd CHAR(17)	MsmTyp_ID INTEGER
ABH_OS_DATA	12
ABH_OS_DATA	13
ABH_OS_DATA	14
ABH_OS_DATA	33
ABH_DISK	15
ABH_DISK	16
ABH_DISK	17
ABH_DISK	18
ABH_NETWORK_CARD	19
ABH_NETWORK_CARD	20
ABH_NETWORK_CARD	21
ABH_NETWORK_CARD	22
ABH_NETWORK_CARD	23
ABH_OS_DATA	24
ABH_SERVER	25
ABH_SERVER	26
ABH_SERVER	27
ABH_SERVER	29
ABH_SERVER	30
ABH_TRANSACTION	1
ABH_TRANSACTION	2
ABH_TRANSACTION	3
ABH_TRANSACTION	4
ABH_TRANSACTION	5
ABH_TRANSACTION	6
ABH_TRANSACTION	7

CompTyp_Cd CHAR(17)	MsmtTyp_ID INTEGER
ABH_TRANSACTION	8
ABH_TRANSACTION	9
ABH_TRANSACTION	10
ABH_TRANSACTION	11
ABH_TRANSACTION	28
ABH_TRANSACTION	31
ABH_PROGRAM	1
ABH_PROGRAM	2
ABH_PROGRAM	3
ABH_PROGRAM	4
ABH_PROGRAM	6
ABH_PROGRAM	7
ABH_PROGRAM	8
ABH_PROGRAM	9
ABH_PROGRAM	11
ABH_PROGRAM	32

6.2.10 Measurement (table Msmt)

Msmt_I D BIGINT	Comp_ ID INTEG ER	MsmtT yp_ID INTEG ER	TmSu m_Cd CHAR	Msmt_ Strt_Dt DATE	Msmt_ Strt_T m TIME	Msmt_ Min_Va I FLOAT	Msmt_ Max_V al FLOAT	Msmt_ Avg_V al FLOAT	Msmt_ Tot_Va I FLOAT	Msmt_ Smpl_ Cnt INTEG ER	Msmt_ Err_Cn t INTEG ER
1	7	1	H	2002-01-31	19:00:00	NULL	NULL	125	NULL	30	NULL
2	8	2	H	2002-01-31	19:00:00	NULL	NULL	632	NULL	68	NULL
3	7	3	H	2002-01-31	19:00:00	NULL	NULL	554	NULL	55	NULL
4	7	4	H	2002-01-31	19:00:00	NULL	NULL	987	NULL	24	NULL
5	7	5	H	2002-01-31	19:00:00	NULL	NULL	659	NULL	36	NULL
6	7	6	H	2002-01-31	19:00:00	NULL	NULL	258	NULL	67	NULL
7	7	7	H	2002-01-31	19:00:00	NULL	NULL	874	NULL	54	NULL

Msmt_ID BIGINT	Comp_ID INTEGER	MsmtTyp_ID INTEGER	TmSum_Cd CHAR	Msmt_Strt_Dt DATE	Msmt_Strt_Tm TIME	Msmt_Min_Val FLOAT	Msmt_Max_Val FLOAT	Msmt_Avg_Val FLOAT	Msmt_Tot_Val FLOAT	Msmt_Smpl_Cnt INTEGER	Msmt_Err_Cnt INTEGER
8	7	8	H	2002-01-31	19:00:00	NULL	NULL	451	NULL	45	NULL
9	7	9	H	2002-01-31	19:00:00	NULL	NULL	325	NULL	68	NULL
10	7	10	H	2002-01-31	19:00:00	NULL	NULL	956	NULL	26	NULL
11	7	11	H	2002-01-31	19:00:00	NULL	NULL	845	NULL	85	NULL

6.3 Helper tables

This warehouse pack does not generate helper tables.

6.4 Exception tables

This warehouse pack does not generate exception tables.

6.5 Incremental extraction

New data in the source database, IBM Tivoli Monitoring for Applications, Version 5.1.0: mySAP.com repository database, is discovered by examining the integer ascending sequence IDs of the relevant tables.

The following actions are performed for extracting mySAP.com measurement type information and inserting the information into metric dimension tables:

- Creates temporary tables in the data mart database to hold the static measurement type information
- Updates the Extract_Control to_intseq value with the maximum metric_id values from the permanent metric tables in the central data warehouse database
- Extracts information from the permanent metric tables and inserts it into the temporary tables
- Copies information from the temporary tables into the permanent metric dimension tables in the data mart database
- Updates extraction information in Extract_Log that causes a trigger to fire and update Extract_Control to close the extraction window

The following actions are performed to extract mySAP.com host component information and insert the information into the associated component dimension table:

- Creates a temporary table in the data mart database to hold the host component information
- Updates the Extract_Control to_intseq value with the maximum comp_source_id value from the CUR_COMP view in the central data warehouse database
- Extracts information from the table view and inserts the information into the temporary table
- Copies the information from the temporary table and inserts the information into the permanent host dimension table in the data mart database
- Updates extraction information in Extract_Log, which causes a trigger to fire and update Extract_Control to close the extraction window

The following actions are performed to extract mySAP.com measurements and insert the measurements into the fact tables:

- Creates staging tables in the data mart database to hold the measurement value information

- Updates the Extract_Control to_intseq value with the maximum msmt_id values from the measurement table (MSMT) in the central data warehouse database
- Extracts information from the measurement table and inserts the information into the staging tables
- Copies information from the staging tables into the permanent hourly fact tables in the data mart database
- Updates extraction information in Extract_Log, which causes a trigger to fire and update Extract_Control to close the extraction window

7 Data mart schema information

The following sections contain the definition of star schemas, metric dimension tables, data marts, and reports provided with the ABH warehouse pack.

Shaded columns in the following tables are translated by the application. Translated columns are also indicated by an asterisk (*) after the column name.

7.1 Star schemas

Before using this section, read about the data mart schema which is described in *Enabling an Application for Tivoli Enterprise Data Warehouse*. That document defines the content of each table and explains the relationships between the tables in this document.

This warehouse pack provides the following star schemas.

7.1.1 ABH Daily mySAP.com Server Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com server components
Name of fact table	ABH.F_SERVER_DAY
Name of metric dimension table	ABH.D_SERVER_METRIC
Name of other dimension tables	ABH.D_SERVER

7.1.1.1 Fact table ABH. F_SERVER_DAY

Metric_ID INTEGER	Server_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.2 ABH Daily mySAP.com Application Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com application components
Name of fact table	ABH.F_TRANS_VIEW_DAY
Name of metric dimension table	ABH.D_APPLGROUP_METRIC
Name of other dimension tables	ABH.D_APPL_GROUP

7.1.2.1 Fact table ABH. F_TRANS_VIEW_DAY

Metric_ID INTEGER	Transaction_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.3 ABH Daily mySAP.com Disk Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com disk components
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Name of fact table	ABH.F_DISK_DAY
Name of metric dimension table	ABH.D_DISK_METRIC
Name of other dimension tables	ABH.D_DISK

7.1.3.1 Fact table ABH. F_DISK_DAY

Metric_ID INTEGER	Disk_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.4 ABH Daily mySAP.com IP Host Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com IP host components
Name of fact table	ABH.F_IP_HOST_DAY
Name of metric dimension table	ABH.D_IP_HOST_METRIC
Name of other dimension tables	ABH.D_IP_HOST

7.1.4.1 Fact table ABH. F_IP_HOST_DAY

Metric_ID INTEGER	Host_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.5 ABH Daily mySAP.com Network Card Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com network card components
Name of fact table	ABH.F_NTWRK_DAY
Name of metric dimension table	ABH.D_NTWRK_METRIC
Name of other dimension tables	ABH.D_NETWORK_CARD

7.1.5.1 Fact table ABH. F_NTWRK_DAY

Metric_ID INTEGER	Network_Card_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.6 ABH Daily mySAP.com Program Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com program components
Name of fact table	ABH.F_PROGRAM_DAY

Name of metric dimension table	ABH.D_PROGRAM_METRIC
Name of other dimension tables	ABH.D_PROGRAM

7.1.6.1 Fact table ABH. F_PROGRAM_DAY

Metric_ID INTEGER	Program_ ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.7 ABH Daily mySAP.com Transaction SLA Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com transaction SLA components
Name of fact table	ABH.F_TRANS_VIEW_DAY
Name of metric dimension table	ABH.D_TX_SLA_METRIC
Name of other dimension tables	ABH.D_TX_SLA

7.1.7.1 Fact table ABH. F_TRANS_VIEW_DAY

Metric_ID INTEGER	Transacti on_ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.8 ABH Daily mySAP.com Transaction Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com transaction components
Name of fact table	ABH.F_TRANS_DAY
Name of metric dimension table	ABH.D_TRANS_METRIC
Name of other dimension tables	ABH.D_TRANSACTION

7.1.8.1 Fact table ABH. F_TRANS_DAY

Metric_ID INTEGER	Transacti on_ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.9 ABH Hourly mySAP.com Server Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the hourly fact table for the mySAP.com server components
Name of fact table	ABH.F_SERVER_HOUR
Name of metric dimension table	ABH.D_SERVER_METRIC

Name of other dimension tables	ABH.D_SERVER
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7.1.9.1 Fact table ABH. F_SERVER_HOUR

Metric_ID INTEGER	Server_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.10 ABH Hourly mySAP.com Application Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the hourly fact table for the mySAP.com application components
Name of fact table	ABH.F_TRANS_VIEW_HOUR
Name of metric dimension table	ABH.D_APPLGROUP_METRIC
Name of other dimension tables	ABH.D_APPL_GROUP

7.1.10.1 Fact table ABH. F_TRANS_VIEW_HOUR

Metric_ID INTEGER	Transaction_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.11 ABH Hourly mySAP.com Disk Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the hourly fact table for the mySAP.com disk components
Name of fact table	ABH.F_DISK_HOUR
Name of metric dimension table	ABH.D_DISK_METRIC
Name of other dimension tables	ABH.D_DISK

7.1.11.1 Fact table ABH. F_DISK_HOUR

Metric_ID INTEGER	Disk_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.12 ABH Hourly mySAP.com IP Host Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the hourly fact table for the mySAP.com IP host components
Name of fact table	ABH.F_IP_HOST_HOUR
Name of metric dimension table	ABH.D_IP_HOST_METRIC
Name of other dimension tables	ABH.D_IP_HOST

7.1.12.1 Fact table ABH. F_IP_HOST_HOUR

Metric_ID INTEGER	Host_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.13 ABH Hourly mySAP.com Network Card Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com network card components
Name of fact table	ABH.F_NTWRK_HOUR
Name of metric dimension table	ABH.D_NTWRK_METRIC
Name of other dimension tables	ABH.D_NETWORK_CARD

7.1.13.1 Fact table ABH. F_NTWRK_HOUR

Metric_ID INTEGER	Network_Card_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.14 ABH Hourly mySAP.com Program Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com program components
Name of fact table	ABH.F_PROGRAM_HOUR
Name of metric dimension table	ABH.D_PROGRAM_METRIC
Name of other dimension tables	ABH.D_PROGRAM

7.1.14.1 Fact table ABH. F_PROGRAM_HOUR

Metric_ID INTEGER	Program_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.15 ABH Hourly mySAP.com Transaction SLA Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com transaction SLA components
Name of fact table	ABH.F_TRANS_VIEW_HOUR
Name of metric dimension table	ABH.D_TX_SLA_METRIC
Name of other dimension tables	ABH.D_TX_SLA

7.1.15.1 Fact table ABH. F_TRANS_VIEW_HOUR

Metric_ID INTEGER	Transaction_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.16 ABH Hourly mySAP.com Transaction Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the daily fact table for the mySAP.com transaction components
Name of fact table	ABH.F_TRANS_HOUR
Name of metric dimension table	ABH.D_TRANS_METRIC
Name of other dimension tables	ABH.D_TRANSACTION

7.1.16.1 Fact table ABH. F_TRANS_HOUR

Metric_ID INTEGER	Transaction_ID INTEGER	Meas_hour TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.17 ABH Monthly mySAP.com Server Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com server components
Name of fact table	ABH.F_SERVER_MONTH
Name of metric dimension table	ABH.D_SERVER_METRIC
Name of other dimension tables	ABH.D_SERVER

7.1.17.1 Fact table ABH. F_SERVER_MONTH

Metric_ID INTEGER	Server_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.18 ABH Monthly mySAP.com Application Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com application components
Name of fact table	ABH.F_TRANS_VIEW_MONTH
Name of metric dimension table	ABH.D_APPLGROUP_METRIC
Name of other dimension tables	ABH.D_APPL_GROUP

7.1.18.1 Fact table ABH.F_TRANS_VIEW_MONTH

Metric_ID INTEGER	Transaction_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.19 ABH Monthly mySAP.com Disk Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com disk components
Name of fact table	ABH.F_DISK_MONTH
Name of metric dimension table	ABH.D_DISK_METRIC
Name of other dimension tables	ABH.D_DISK

7.1.19.1 Fact table ABH.F_DISK_MONTH

Metric_ID INTEGER	Disk_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.20 ABH Monthly mySAP.com IP Host Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com IP host components
Name of fact table	ABH.F_IP_HOST_MONTH
Name of metric dimension table	ABH.D_IP_HOST_METRIC
Name of other dimension tables	ABH.D_IP_HOST

7.1.20.1 Fact table ABH.F_IP_HOST_MONTH

Metric_ID INTEGER	Host_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.21 ABH Monthly mySAP.com Network Card Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com network card components
Name of fact table	ABH.F_NTWK_MONTH
Name of metric dimension table	ABH.D_NTWK_METRIC
Name of other dimension tables	ABH.D_NETWORK_CARD

7.1.21.1 Fact table ABH.F_NTWRK_MONTH

Metric_ID INTEGER	Network_ Card_ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.22 ABH Monthly mySAP.com Program Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com program components
Name of fact table	ABH.F_PROGRAM_MONTH
Name of metric dimension table	ABH.D_PROGRAM_METRIC
Name of other dimension tables	ABH.D_PROGRAM

7.1.22.1 Fact table ABH.F_PROGRAM_MONTH

Metric_ID INTEGER	Program_ ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.23 ABH Monthly mySAP.com Transaction SLA Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com transaction SLA components
Name of fact table	ABH.F_TRANS_VIEW_MONTH
Name of metric dimension table	ABH.D_TX_SLA_METRIC
Name of other dimension tables	ABH.D_TX_SLA

7.1.23.1 Fact table ABH.F_TRANS_VIEW_MONTH

Metric_ID INTEGER	Transacti on_ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.24 ABH Monthly mySAP.com Transaction Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the monthly fact table for the mySAP.com transaction components
Name of fact table	ABH.F_TRANS_MONTH
Name of metric dimension table	ABH.D_TRANS_METRIC
Name of other dimension tables	ABH.D_TRANSACTION

7.1.24.1 Fact table ABH. F_TRANS_MONTH

Metric_ID INTEGER	Transaction_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.25 ABH Weekly mySAP.com Server Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com server components
Name of fact table	ABH.F_SERVER_WEEK
Name of metric dimension table	ABH.D_SERVER_METRIC
Name of other dimension tables	ABH.D_SERVER

7.1.25.1 Fact table ABH. F_SERVER_WEEK

Metric_ID INTEGER	Server_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.26 ABH Weekly mySAP.com Application Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com application components
Name of fact table	ABH.F_TRANS_VIEW_WEEK
Name of metric dimension table	ABH.D_APPLGROUP_METRIC
Name of other dimension tables	ABH.D_APPL_GROUP

7.1.26.1 Fact table ABH. F_TRANS_VIEW_WEEK

Metric_ID INTEGER	Transaction_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.27 ABH Weekly mySAP.com Disk Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com disk components
Name of fact table	ABH.F_DISK_WEEK
Name of metric dimension table	ABH.D_DISK_METRIC
Name of other dimension tables	ABH.D_DISK

7.1.27.1 Fact table ABH. F_DISK_WEEK

Metric_ID INTEGER	Disk_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.28 ABH Weekly mySAP.com IP Host Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com IP host components
Name of fact table	ABH.F_IP_HOST_WEEK
Name of metric dimension table	ABH.D_IP_HOST_METRIC
Name of other dimension tables	ABH.D_IP_HOST

7.1.28.1 Fact table ABH. F_IP_HOST_WEEK

Metric_ID INTEGER	Host_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.29 ABH Weekly mySAP.com Network Card Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com network card components
Name of fact table	ABH.F_NTWK_WEEK
Name of metric dimension table	ABH.D_NTWK_METRIC
Name of other dimension tables	ABH.D_NETWORK_CARD

7.1.29.1 Fact table ABH. F_NTWK_WEEK

Metric_ID INTEGER	Network_Card_ID INTEGER	Meas_date TIMESTAMP	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_count DOUBLE

7.1.30 ABH Weekly mySAP.com Program Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com program components
Name of fact table	ABH.F_PROGRAM_WEEK
Name of metric dimension table	ABH.D_PROGRAM_METRIC
Name of other dimension tables	ABH.D_PROGRAM

7.1.30.1 Fact table ABH. F_ PROGRAM_WEEK

Metric_ID INTEGER	Program_ ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.31 ABH Weekly mySAP.com Transaction SLA Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com transaction SLA components
Name of fact table	ABH.F_TRANS_VIEW_WEEK
Name of metric dimension table	ABH.D_TX_SLA_METRIC
Name of other dimension tables	ABH.D_TX_SLA

7.1.31.1 Fact table ABH. F_TRANS_VIEW_WEEK

Metric_ID INTEGER	Transacti on_ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.1.32 ABH Weekly mySAP.com Transaction Star Schema

The following table defines the star schema. The description of the star schema is translated.

Description of star schema (in IWH_STARSHEMA)	Star schema with dimension tables associated with the weekly fact table for the mySAP.com transaction components
Name of fact table	ABH.F_TRANS_WEEK
Name of metric dimension table	ABH.D_TRANS_METRIC
Name of other dimension tables	ABH.D_TRANSACTION

7.1.32.1 Fact table ABH. F_TRANS_WEEK

Metric_ID INTEGER	Transacti on_ID INTEGER	Meas_date TIMESTAM P	Min_value DOUBLE	Max_value DOUBLE	Avg_value DOUBLE	Total_value DOUBLE	Sample_co unt DOUBLE

7.2 Metric dimension tables

This section describes the metric dimension tables used by the star schemas in this warehouse pack.

7.2.1 ABH. D_SERVER_METRIC

metric_I D INTEGER	Met_cate gory * VARCHA R(254)	met_des c * VARCHA R(254)	met_nam e * VARCHA R(254)	met_unit s * VARCHA R(254)	min_exis ts CHAR(1)	max_exis ts CHAR(1)	ave_exist s ir CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHA R(254)

7.2.2 ABH. D_IP_HOST_METRIC

metric_ID INTEGER	Met_category * VARCHAR R(254)	met_desc * VARCHAR R(254)	met_name * VARCHAR R(254)	met_units * VARCHAR R(254)	min_exists CHAR(1)	max_exists CHAR(1)	ave_exists CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHAR R(254)

7.2.3 ABH. D_TRANS_METRIC

metric_ID INTEGER	Met_category * VARCHAR R(254)	met_desc * VARCHAR R(254)	met_name * VARCHAR R(254)	met_units * VARCHAR R(254)	min_exists CHAR(1)	max_exists CHAR(1)	ave_exists CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHAR R(254)

7.2.4 ABH. D_PROGRAM_METRIC

metric_ID INTEGER	Met_category * VARCHAR R(254)	Met_desc * VARCHAR R(254)	met_name * VARCHAR R(254)	met_units * VARCHAR R(254)	min_exists CHAR(1)	max_exists CHAR(1)	ave_exists CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHAR R(254)

7.2.5 ABH. D_NTWRK_METRIC

Metric_ID INTEGER	Met_category * VARCHAR R(254)	met_desc * VARCHAR R(254)	met_name * VARCHAR R(254)	met_units * VARCHAR R(254)	min_exists CHAR(1)	max_exists CHAR(1)	ave_exists CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHAR R(254)

7.2.6 ABH. D_DISK_METRIC

Metric_ID INTEGER	Met_category * VARCHAR R(254)	met_desc * VARCHAR R(254)	met_name * VARCHAR R(254)	met_units * VARCHAR R(254)	min_exists CHAR(1)	max_exists CHAR(1)	ave_exists CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHAR R(254)

7.2.7 ABH. D_APPLGROUP_METRIC

Metric_ID INTEGER	Met_category * VARCHAR R(254)	met_desc * VARCHAR R(254)	met_name * VARCHAR R(254)	met_units * VARCHAR R(254)	min_exists CHAR(1)	max_exists CHAR(1)	ave_exists CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHAR R(254)

7.2.8 ABH. D_TX_SLA_METRIC

Metric_ID INTEGER	Met_category * VARCHAR R(254)	met_desc * VARCHAR R(254)	met_name * VARCHAR R(254)	met_units * VARCHAR R(254)	min_exists CHAR(1)	max_exists CHAR(1)	ave_exists CHAR(1)	total exists CHAR(1)	msrc_nm * VARCHAR R(254)

7.3 Dimension tables

The following sections describe the dimension tables (other than metric dimension tables) used by the star schemas in this warehouse pack.

7.3.1 Dimension table ABH.D_IP_HOST

The following columns are used in this dimension table:

- system_label varchar(34)
- ip_host varchar(55)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.3.2 Dimension table ABH.D_SERVER

The following columns are used in this dimension table:

- system_label varchar(34)
- ip_host varchar(55)
- rfc_dest_str varchar(20)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.3.3 Dimension table ABH.D_TRANSACTION

The following columns are used in this dimension table:

- system_label varchar(34)
- ip_host varchar(55)
- rfc_dest_str varchar(20)
- user_name varchar(30)
- task_type char(1)
- t_code varchar(20)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.3.4 Dimension table ABH.D_APPL_GROUP

The following columns are used in this dimension table:

- system_label varchar(34)
- ip_host varchar(55)
- rfc_dest_str varchar(20)
- group_area varchar(2)
- group_name varchar(80)
- t_code varchar(20)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.3.5 Dimension table ABH.D_TX_SLA

The following columns are used in this dimension table:

- system_label varchar(34)
- group_name varchar(80)
- t_code varchar(20)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.3.6 Dimension table ABH.D_PROGRAM

The following columns are used in this dimension table:

- system_label varchar(34)
- ip_host varchar(55)
- rfc_dest_str varchar(20)
- user_name varchar(30)
- cua_prog varchar(30)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.3.7 Dimension table ABH.D_NETWORK_CARD

The following columns are used in this dimension table:

- system_label varchar(34)
- ip_host varchar(55)
- network_card varchar(34)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.3.8 Dimension table ABH.D_DISK

The following columns are used in this dimension table:

- system_label varchar(34)
- ip_host varchar(55)
- disk_name varchar(34)
- cust_acct_cd varchar(10)
- centr_cd varchar(3)
- comp_id integer not null

7.4 Data marts and reports

This warehouse pack provides the following data marts.

7.4.1 Data mart ABH mySAP.com Data Mart

This data mart uses the following star schemas:

- ABH Daily mySAP.com Server Star Schema
- ABH Daily mySAP.com Application Star Schema
- ABH Daily mySAP.com Disk Star Schema
- ABH Daily mySAP.com IP Host Star Schema
- ABH Daily mySAP.com Network Card Star Schema
- ABH Daily mySAP.com Program Star Schema
- ABH Daily mySAP.com Transaction SLA Star Schema
- ABH Daily mySAP.com Transaction Star Schema
- ABH Hourly mySAP.com Application Star Schema
- ABH Hourly mySAP.com Disk Star Schema
- ABH Hourly mySAP.com IP Host Star Schema
- ABH Hourly mySAP.com Network Card Star Schema
- ABH Hourly mySAP.com Program Star Schema
- ABH Hourly mySAP.com Server Star Schema

- ABH Hourly mySAP.com Transaction SLA Star Schema
- ABH Hourly mySAP.com Transaction Star Schema
- ABH Monthly mySAP.com Application Star Schema
- ABH Monthly mySAP.com Disk Star Schema
- ABH Monthly mySAP.com IP Host Star Schema
- ABH Monthly mySAP.com Network Card Star Schema
- ABH Monthly mySAP.com Program Star Schema
- ABH Monthly mySAP.com Server Star Schema
- ABH Monthly mySAP.com Transaction SLA Star Schema
- ABH Monthly mySAP.com Transaction Star Schema
- ABH Weekly mySAP.com Application Star Schema
- ABH Weekly mySAP.com Disk Star Schema
- ABH Weekly mySAP.com IP Host Star Schema
- ABH Weekly mySAP.com Network Card Star Schema
- ABH Weekly mySAP.com Program Star Schema
- ABH Weekly mySAP.com Server Star Schema
- ABH Weekly mySAP.com Transaction SLA Star Schema
- ABH Weekly mySAP.com Transaction Star Schema

7.4.1.1 Reports

This data mart provides the following prepackaged reports.

7.4.1.1.1 *mySAP SLA conformance by rolling 30 days*

This extreme case report compares mySAP.com transaction SLA conformance ranking over the last 30 days.

7.4.1.1.2 *mySAP program count by rolling 30 days*

This extreme case report compares mySAP.com application server program count ranking over the last 30 days.

7.4.1.1.3 *mySAP server CPU ranking by rolling 30 days*

This extreme case report compares mySAP.com server ranking by CPU utilization over the last 30 days.

7.4.1.1.4 *mySAP task type CPU ranking by rolling 30 days*

This extreme case report compares mySAP.com task type CPU ranking over the last 30 days.

7.4.1.1.5 *mySAP application server uptime by rolling 30 days*

This extreme case report compares mySAP.com application server ranking by availability over the last 30 days.

7.4.1.1.6 *mySAP application server logins by rolling 30 days*

This extreme case report compares mySAP.com application server logins ranking over the last 30 days.

7.4.1.1.7 *mySAP application area by rolling 30 days*

This extreme case report compares mySAP.com application area transaction response ranking over the last 30 days.

7.4.1.1.8 *mySAP application area dialogs by rolling 30 days*

This extreme case report compares mySAP.com application area dialog count ranking over the last 30 days.

7.4.1.1.9 *mySAP dialog count by rolling 30 days*

This extreme case report compares mySAP.com application server dialog count ranking over the last 30 days.