



Operations Guide

SAP Business Planning and Consolidation 7.0

version for the Microsoft platform

Target Audience

- Technical Consultants
- System Administrators
- Solution Consultants
- Business Process Owner
- Support Specialist

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The following table provides an overview of the most important document changes.

Version	Date	Description
1.0	7/31/2008	Initial release of document.
1.1	10/17/2008	Updated for use with SP02.
2.0	2/13/2009	Updated for use with SP03.
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3.1	7/31/2009	Removed references to specific SPs because Guide is relevant for all 7.0 M versions.

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1 Monitoring of BPC

1.1 Monitoring with the Management Console

The Management Console monitors a Business Planning and Consolidation (BPC) and Microsoft Platform installation at the hardware, server software, and BPC level to provide system baselines, to allow proactive system performance optimization, and to assist in platform support and troubleshooting.

1.1.1 Information and Actions in the Management Console

Information in the Management Console

The following information is available in the Management Console:

- The status of BPC processes
- Performance metrics of the Windows Server Operating System, the Web Server, SQL Server, and Analysis Services
- A list of which BPC users are active on the system
- Details about what function each user is executing
- A list of resource-intensive processes
- Access to a detailed server diagnosis utility

Actions in the Management Console

The following actions can be performed in the Management Console:

- Activate and deactivate BPC logging
- End resource-intensive processes
- Manage logging schedules (archiving and deletion parameters)



Note

There is no means of changing logging severity levels in the Management Console; system logs are either enabled or disabled. By default, logging is disabled. For more information about enabling or disabling logs, see *Managing Event Log Records* [page [17](#)]. For information about the severity levels recorded in the logs, see the *Status* field description in *Management Console Logging Fields* [page [18](#)].



Caution

Ensure that these actions are performed by an authorized system administrator.

1.1.2 Management Console Usage and Installation

Management Console Installation

For information about setting up the Management Console, see

<http://service.sap.com/instguidescpm-bpc> ▶ Release 7.0 → SAP BPC 7.0 Installation Guide ◀.

To access the Management Console, open a browser and enter http://server_name/ManagementConsole/, where `server_name` is the name of your BPC application server.

Centralized Monitoring in a Server Farm

In an environment where multiple Application Servers are implemented (for the purposes of providing high availability), each server has its own Management Console. Each console is used to monitor just the server on which it is installed. SAP Solution Manager diagnostics can be used to provide a centralized view of the Application Servers by linking to the various consoles. Additional monitoring capabilities are provided by CA Wily Introscope. See *CA Wily Introscope Integration* [page 41].

Prerequisites

The Management Console requires Microsoft SQL Server 2005. Microsoft SQL Server 2000 is not supported.

1.1.3 Monitoring the Application, Database, and Web Servers

The Management Console provides performance metrics for the Windows Server Operating System, the Web server, SQL Server, and Analysis Services. In addition, many of these metrics are summarized on the Management Console *Home* page. The information provided for each of these system tiers is detailed in the tables in the following topics.

1.1.3.1 Management Console Home Screen Fields

The following table lists fields in the Management Console *Home* screen.

Field	Description	Path
<i>Process ID</i>	A numerical identifier that uniquely identifies a process while it runs.	▶ Home → Task Manager ◀
<i>Image Name</i>	The process name	▶ Home → Task Manager ◀
<i>Mem Usage</i>	The amount of the physical memory used by the process. By default, this column is sorted in descending order, so that the most resource-intensive process appears at the top.	▶ Home → Task Manager ◀

Field	Description	Path
<i>Task ID</i>	The process ID of the currently selected task	► Home → Center pane ◄
<i>App ID</i>	The application ID of the currently selected task	► Home → Center pane ◄
<i>Name</i>	The name of the currently selected task	► Home → Center pane ◄
<i>Description</i>	The description of the currently selected task	► Home → Center pane ◄
<i>Service Name</i>	The service name of the currently selected task	► Home → Center pane ◄
<i>Shutdown After</i>	The value that appears after system shutdown	► Home → Center pane ◄
<i>Hits By User</i>	The number of times that each user has accessed BPC	► Home → Hits by User ◄
<i>Status Breakdown</i>	Displays a graphical representation of the HTTP status codes in the systems, by percentage.	► Home → Status Breakdown ◄
<i>CPU Utilization</i>	Indicates the current processor load, as a percentage. This number is an average across all of the available processors or cores available on the machine.	► Home → System Performance (App Server) ◄
<i>Memory: Pages Writes/sec</i>	This indicates the number of physical memory pages per second being used by the system. The value is a sum of all physical memory banks in the machine.	► Home → System Performance (App Server) ◄
<i>Available Bytes</i>	The physical memory, in available bytes, that can be used by the system without the need to use virtual memory or the page file. The value is a sum of all physical memory banks in the machine.	► Home → System Performance (App Server) ◄
<i>Avg Disk Bytes per Read</i>	The average number of bytes per read from the physical disk(s) in the machine	► Home → Server Disk IO ◄
<i>Avg Disk Write Queue Length</i>	The average number of write requests that were queued for the selected disk during the sample interval	► Home → Server Disk IO ◄

Field	Description	Path
<i>Current Disk Queue Length</i>	The average number of bytes per read from the physical disk(s) in the machine. This value is an aggregate of all drives on the machine .	► Home → Server Disk IO ◀
<i>Current Locks</i>	Indicates the number of locks on tables or cubes currently in the database. This number is an aggregate of the locks on all of the databases on the machine.	► Home → Analysis Services Connections and Locks ◀
<i>Current Lock Waits</i>	Indicates the number of clients waiting for a lock to be released. This is an aggregate of all of the clients waiting for lock releases for all of the databases on the machine.	► Home → Analysis Services Connections and Locks ◀
<i>Current Connections</i>	The number of current, active server connections	► Home → Analysis Services Connections and Locks ◀
<i>Cache Evictions per Second</i>	This number indicates the frequency with which the cache is returning information to the disk. If this number consistently ranges from 50 to 100, evaluate your hardware resources.	► Home → Analysis Services Connections and Locks ◀



Note

The *App ID*, *Name*, *Description*, *Service Name*, and *Shutdown After* fields contain a value only when a DLL host is selected. You can use that value determine the identity of the COM object.

1.1.3.2 Management Console Web Server Fields


The following table lists the fields on the Management Console Web Server screen.


Field	Description	Path
User	The number of active users in the BPC system	► Web Server → Summary → Who's Online ◀
Hits	The number of service requests	► Web Server → Summary → Who's Online ◀
Service Status Code	The HTTP status code	► Web Server → Summary → All Active Pages ◀
Description	The HTTP status code description	► Web Server → Summary → All Active Pages ◀


Hits	The number of service requests	► Web Server → Summary → All Active Pages ◀
Service Status Code	The HTTP status code	► Web Server → Who's Online → Service Status ◀
Description	The HTTP status code description	► Web Server → Who's Online → Service Status ◀
Hits	The number of service requests	► Web Server → Who's Online → Service Status ◀
Target Page	The location of the page that is being requested	► Web Server → Who's Online → All Active Pages ◀
Hits	The number of service requests on the page	► Web Server → Who's Online → All Active Pages ◀
Who's Online	The list of active users in the BPC system	► Web Server → Who's Online → Who's Online ◀
Page Hits by User	The number of pages requested by all active users	► Web Server → Who's Online → Page Hits by User ◀
Count	For the currently selected user, the number of pages requested between the first and last requests.	► Web Server → Who's Online → User Detail ◀
First Request	The time of the first request	► Web Server → Who's Online → User Detail ◀
Last Request	The time of the last request	► Web Server → Who's Online → User Detail ◀
Service Status	The HTTP status code	► Web Server → Who's Online → User Detail ◀
Target Page	The location of the page that is being requested	► Web Server → Who's Online → User Detail ◀
Parameters	Displays any parameters that are sent to the requested page.	► Web Server → Who's Online → User Detail ◀
User Request By Status Over Time	Displays an analysis of the currently selected user in the Who's Online panel, in terms of the HTTP status code of their requests.	Web Server > Who's Online > User Request By Status Over Time ► Web Server → Who's Online → User Request By Status Over Time ◀
Service Status	The HTTP status code	► Web Server → Services → Service Status ◀


Selected Status Detail	Provides additional details about the service chosen in the Service Status pane.	► Web Server → Services → Selected Status Detail ↩
Selected Status Over Time	Provides a count of the selected HTTP status code over time (the number of occurrences for the time frame presented).	Web Server > Services > ► Web Server → Services → Selected Status Over Time ↩

1.1.3.3 Management Console Database Server Fields

Field	Description	Path
SPID ECID Status Login Name Host Name BLK DBName Command Request ID	Refer to Microsoft SQL Server documentation.	► Database Server → Summary → Who ↩ ► Database Server → SQL Server → Who ↩
OLE DB Calls	The number of OLE database calls.  Caution Ensure that this value is never greater than the number of user connections.	► Database Server → Summary → SQL Server Statistics ↩
Active Temp Tables	The database server utilizes temp tables to handle data-intensive queries. A lack of temp tables under these conditions can indicate low disk space.	► Database Server → Summary → SQL Server Statistics ↩
Processes Blocked	Indicates the number of processes that are blocked because of a query.	► Database Server → Summary → SQL Server Statistics ↩
CPU Utilization	Indicates the current processor load, as a percentage. This number is an average across all of the available processors/cores available on the machine.	► Database Server → Summary → System Performance (Database Server) ↩
Memory: Pages Writes/sec	This indicates the number of physical memory pages per second being used by the system. The value is a sum of all physical memory banks in the machine.	► Database Server → Summary → System Performance (Database Server) ↩

Available Bytes	The physical memory in available bytes that can be used by the system without the need to use virtual memory or the page file. The value is a sum of all physical memory banks in the machine.	► Database Server → Summary → System Performance (Database Server) ◀
Current Locks	Indicates the number of locks on tables or cubes currently in the database. This number is an aggregate of the locks on all of the databases on the machine.	► Database Server → Summary → Analysis Services Connections & Locks ◀
Current Lock Waits	Indicates the number of clients waiting for a lock to be released. This is an aggregate of all of the clients waiting for lock releases for all of the databases on the machine.	► Database Server → Summary → Analysis Services Connections & Locks ◀
Current Connections	The number of current, active server connections.	► Database Server → Summary → Analysis Services Connections & Locks ◀
Cache Evictions per Second	<p>This number indicates the frequency with which the cache is returning information to the disk.</p> <p> Recommendation If this number consistently ranges from 50 to 100, we recommend that you evaluate your hardware resources.</p>	► Database Server → Summary → Analysis Services Connections & Locks ◀
Avg Disk Bytes per Read	The average number of bytes per read from the physical disks in the machine	► Database Server → SQL Server → Who ◀
Avg Disk Write Queue Length	The average number of write requests that were queued for the physical disks in the machine	► Database Server → SQL Server → Who → Database Disk IO ◀
Current Disk Queue Length	The current number of queued disk operations. If this number spikes during poor processing performance, especially during the base or aggregating phases, then the current disk storage solution may not be adequate to support the needs of Analysis Services. Ideally, the value of this performance counter should be as low as possible at any given time.	► Database Server → SQL Server → Who → Database Disk IO ◀

User Connections	The number of users with a current, open connection to the database server.	► Database Server → SQL Server → SQL Server Statistics ◀
OLE DB Calls	<p>The number of OLE database calls.</p> <div>  Caution Ensure that this value is never greater than the number of user connections. </div>	► Database Server → SQL Server → SQL Server Statistics ◀
Active Temp Tables	The database server utilizes temp tables to handle data-intensive queries. A lack of temp tables under these conditions can indicate low disk space.	► Database Server → SQL Server → SQL Server Statistics ◀
Processes Blocked	Indicates the number of processes that are blocked because of a query.	► Database Server → SQL Server → SQL Server Statistics ◀
Operations by Database	A graphical display of the current, active processes, categorized by database.	► Database Server → SQL Server → Who → Operations by Database ◀
SPID Status Login Name Host Name BLK By DB Name Command CPU Time Disk IO Last Batch Program SPID 1 Request ID	Refer to Microsoft SQL Server documentation.	► Database Server → SQL Server → Who2 ◀
Instance SqlMessage Message Step ID Step Name SqlSeverity JobID JobName RunStatus RunDate RunDuration Operator Emailed OperatorNetsent OperatorPaged RetriesAttempted	Refer to Microsoft SQL Server documentation.	► Database Server → SQL Server → SQL Server Agent Statistics ◀

Current Locks	Indicates the number of locks on tables or cubes currently in the database. This number is an aggregate of the locks on all of the databases on the machine.	► Database Server → Analysis Services → Analysis Services Connections & Locks ◀
Current Lock Waits	Indicates the number of clients waiting for a lock to be released. This is an aggregate of all of the clients waiting for lock releases for all of the databases on the machine.	► Database Server → Analysis Services → Analysis Services Connections & Locks ◀
Current Connections	The number of current, active server connections.	► Database Server → Analysis Services → Analysis Services Connections & Locks ◀
Cache Evictions per Second	<p>This number indicates the frequency with which the cache is returning information to the disk.</p> <p> Recommendation If this number consistently ranges from 50 to 100, we recommend that you evaluate your hardware resources.</p>	► Database Server → Analysis Services → Analysis Services Connections & Locks ◀
Avg Disk Bytes per Read	The average number of bytes per read from the physical disks in the machine.	► Database Server → Analysis Services → Analysis Services Disk IO ◀
Avg Disk Write Queue Length	The average number of write requests that were queued for the physical disks in the machine	► Database Server → Analysis Services → Analysis Services Disk IO ◀
Current Disk Queue Length	This counter represents the current number of queued disk operations. If this number spikes during poor processing performance, especially during the base or aggregating phases, then the current disk storage solution may not be adequate to support the needs of Analysis Services. Ideally, the value of this performance counter should be as low as possible at any given time.	► Database Server → Analysis Services → Analysis Services Disk IO ◀

1.1.4 Alert Monitoring with the Management Console

You can set alerts in the Management Console, to provide a visual cue when designated server thresholds are exceeded. For example, you can set an alert when CPU Utilization exceeds a certain percentage.

Function	Navigation	What You Need to Know
Setting alerts on the application server	► <i>Home</i> → <i>System Performance (App Server)</i> ◄ Choose <i>Set Thresholds</i> .	The System Performance panel is highlighted by a red border while the threshold is exceeded.
Setting alerts on the database server	► <i>Database Server</i> → <i>Summary</i> → <i>System Performance (Database Server)</i> ◄ Choose <i>Set Thresholds</i> .	The System Performance panel is highlighted by a red border while the threshold is exceeded.

1.1.5 Identifying and Stopping a Resource-Intensive Process

To identify a resource-intensive process, examine the *Task Manager* on the *Home* screen. By default, the processes in this table are sorted by descending order, in terms of memory usage. The most resource-intensive process appears at the top. To stop a process, select it in the *Task Manager* on the *Home* screen, and choose *Stop Process*.

For more information, see *Management Console Home Screen Fields* [page 8].



Note

You can set the recovery options for a process to determine whether or not it restarts automatically after you end it using Management Console. To examine and modify these settings in Microsoft Windows, choose ► *Start* → *Administrative Tools* → *Services* ◄. In the context menu of the service, choose *Properties*. On the *Recovery* tab, select the conditions under which the service should restart.

1.1.6 Performing a Detailed Server Diagnosis

In the Management Console, you can run a diagnostic utility to create a detailed report that includes information about:

- The status of the various component services
- Database connectivity
- Microsoft Internet Information Services (IIS) configuration

To run a detailed server diagnostic, choose ► *BPC* → *Logging* → *Server Diagnostic* ◄.

1.1.7 Management Console Event Logs

1.1.7.1 Managing Event Log Records

The debug logs in BPC are optional, and (by default) not active. However, the logging section does display all of the status and error messages that BPC issues during normal operation. In the logging area of the Management Console, you can:

- Activate or deactivate debugging logs
- Set the amount of time that elapses before logs are deleted or moved to a history table in the database

Function	Navigation	What You Should Know
Activate or deactivate optional component logging	► BPC → Logging → Admin Options → Manage Debug Logs ◀	For performance reasons, do not enable debugging logs on an open-ended basis in a production environment. Enable debugging logs for just the minimum time needed to complete your analysis.
Archive current history logs	► BPC → Logging → Admin Options → Manage System Logs → Move current logs to history ◀	This function moves all of the logging messages currently being displayed on the screen to the database. Current logs are saved in <code>tblLogs</code> , while archived logs are saved in <code>tblLogHist</code> .
Delete all history logs	► BPC → Logging → Admin Options → Manage System Logs → Delete history logs ◀	This function deletes all history logs in the system.
Archive dated history logs	► BPC → Logging → Admin Options → Schedule → Move current logs if ◀	These logs are moved to the <code>tblLogHist</code> database table.
Delete dated history logs	► BPC → Logging → Admin Options → Schedule → Purge history logs if ◀	This function deletes history logs, based on conditions that you in the system.



Note

In a network load balancing environment, you must specify the name of the virtual machine (rather than the physical machine) in the configuration file on the application server. Go to ► *<BPC installation folder>* → *Websrvr* → *ManagementConsole* ◀ on the application server. Open the *Web.config* file and change the physical machine name to the virtual machine name in the places shown in bold text below.

```
<configuration>
```

```
<appSettings>
```

```

<add key="APP_Server" value="[virtual machine name]" />
<add key="Logging.LoggingService" value="https://[virtual machine name]:<port
number>/osoft/app/LoggingService/LoggingService.asmx" />
<add key="TaskSecurity.Security" value="https://[virtual machine name]:<port
number>/osoft/app/UserService/Security.asmx" />
<add key="SystemConfig.SystemConfigService" value="https://[virtual machine
name]:<port number>/osoft/app/SystemConfigService/SystemConfigService.asmx" />
</appSettings>
</configuration>


```

1.1.7.2 Management Console Logging Fields

The fields listed in the table below can be found in the logging section. To access these fields, choose ► *BPC* → *Logging* → *BPC Logging* ◀.

Features

You can search for records by any of the fields listed below. However, because of a Management Console limitation, we recommend that you avoid the use of time parameters in a search.

Field	Description
ID	<p>The job or process ID.</p> <div>  Note This field can be double-clicked to open the <i>BPC Logging</i> dialog box, which contains message metadata, including detailed information or error messages (where applicable). </div>
System	This field displays the source BPC component.
Job	The job or process name
Status	<p>The severity level of the logging message:</p> <ul style="list-style-type: none"> ■ Information (contains descriptive information about the event) ■ Warning (this event may warrant further investigation) ■ Error (this log entry notifies you of an unexpected or adverse outcome)
Date	The date on which the process executed.

1.2 Other BPC Log Files

This section details log files, from an operations perspective.

1.2.1 Miscellaneous Log Files

The following table contains a list of miscellaneous BPC log files:

Log File Notation	Location	Description
osoftdiagnostic.txt	serverpath/server management/	Output of the SAP BPC Server Diagnostics program
HTTPERR	systemroot/LogFiles/	IIS HTTP error log files
*.log	systemroot/LogFiles/W3SVC1/	General IIS log files

1.2.2 Logic Debugging Log File

The `debuglogic.log` captures all advanced logic (script or business rules). You can find the `debuglogic.log` file in the following location:

[<BPC_Home>\webfolders\<Appset>\<application>\privatepublication\<username>\](#)



Note

This log file is designed to be used primarily by experienced BPC consultants and support personnel. Over time, this file can consume a considerable amount of disk space.

1.2.3 Data Manager Log Files

Whenever you use a Data Manager package to move BPC data, BPC creates a temporary file with a `.TMP` extension. This temporary file can be found in the following location:

[<BPC_Home>\webfolders\<Appset>\<application>\privatepublication\<username>\](#)

These temporary files act as a kind of log file for the data management process, and can be useful in troubleshooting the execution of packages.



Note

Over time, these files can consume a considerable amount of disk space. However, they can be safely deleted once a package has completed.

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that are printed on both sides.**

2 Management of BPC

SAP provides you with an infrastructure to help your technical support consultants and system administrators effectively manage all SAP components and complete all tasks related to technical administration and operation.

2.1 Asynchronous Interfaces and Data Transfers

Asynchronous Interfaces

There are two asynchronous data exchange interfaces in BPC:

- BPC for Office Data Transfers (specifically, the EvSND and EvDRE functions)
- The Data Manager Import package

Data Consistency in the Event of an Interruption in Data Transfer

Data consistency is automatically managed by the system in the event of an interruption in the transfer of data between a client and the server. For instance, an interruption can occur due a workstation crash or restart. Upon resumption of the data transfer, BPC checks for differences between data that has already been transferred and the data that remains to be transferred. BPC only transfers data that was not previously transferred. Given that data consistency is preserved by the system in this way, there is no separate interface for managing interrupted data transfers.



Note

If a Data Manager package fails to finish executing, you may experience an issue in which you can not clear the status of the package. As mentioned above, this does not affect the integrity of the data. For information about clearing the package status, see *Troubleshooting in Data Manager* [page 38].

2.2 Stored Configuration Values

For information about the variables that are set during the installation process, see the <http://service.sap.com/instguidescpm-bpc> 7.0, version for the Microsoft Platform → SAP BPC 7.0 Configuration Guide ↩.

2.3 Backup and Restore

You need to back up your system landscape regularly to ensure that you can restore and recover it in case of failure. The backup and restore strategy for BPC comprises the following concepts:

- Back up and restore coverage for each component
- Cross-system data dependencies and handling

To develop a comprehensive backup and restoration strategy, consider the impact of each of the following items:

- Your SAP systems
- Overall business requirements
- Enterprise process flows
- Disaster recovery strategies (ensure that backup devices are not lost together with normal data storage)

2.4 Periodic Tasks

2.5 Controlling the Flow of Data to the Database

BPC stages data in the `Send Governor (SG)` table before it is written to the `write-back` table. This allows you to have more control over the rate at which data is written to the `write-back` table. You can create differing strategies, depending on your resource constraints or system usage.

You can control the following `SG` and `write-back` table parameters:

- Frequency at which system sends data to the `write-back` table
- The number of records that are added to the `write-back` table at one time
- The number of additional threads that can be created to send data from the `SG` table to the `write-back` table
- The number of records that can be processed by one thread

The following application set parameters control `Send Governor` functionality:

- `INTERVAL_CHECK_SEND`
- `UNITPER_SP`
- `THREAD_MAXNUM_SG`
- `MAXCELLS_THREAD_SG`

See the application set parameters section in see the

<http://service.sap.com/instguidescpm-bpc> 7.0, version for the Microsoft

Platform → SAP BPC 7.0 Administration Guide ↩

Considerations when Modifying Send Governor Parameters

Send Governor application set parameters can be modified as a means of tuning performance. When tuning performance, consider the following:

- For situations in which you have a larger user base (with a large number of concurrent users) you may wish to use fewer threads with a bigger interval.
- Increasing the value of MAXCELLS_THREAD_SG would improve performance for a single send, while degrading the system's ability to process concurrent users.
- Increasing the value of UNITPER_SP would improve performance for a single send, while degrading the system's ability to process concurrent users.

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3 High Availability

3.1 High Availability Recommendations

To ensure high availability, efficiently manage incoming server requests, and eliminate single points of failure for SAP BPC, you should take the following recommendations into consideration when designing your environment:

- Install multiple web and application servers (that is, create server tiers).
- Use a hardware or software load balancer to manage incoming traffic for the application server.
- Implement the Microsoft SQL Server solutions for high availability and fail-over for your clustered servers.

For more information about BPC architecture and architecture, see:

<http://service.sap.com/instguidescpm-bpc> ▶ 7.0, version for the Microsoft Platform → SAP BPC 7.0 Master Guide ↵.

<http://service.sap.com/instguidescpm-bpc> ▶ 7.0, version for the Microsoft Platform → SAP BPC 7.0 Installation Guide ↵.

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4 Software Change Management

Transports between your development, test, and production environments must be manually performed by your BPC administrator or an SAP representative.



Recommendation

We recommend that you involve SAP technical consultants in transport operations.

This section provides tips for incrementally moving BPC information through these environments. These procedures should be considered recommendations and guidelines, and could require modification based on your environment.

IT infrastructures typically support a development, a test, and a production instance of a business system. This guide describes how to manage the transport from test to production. While the transport from development to test is analogous, your development procedures may vary.



Recommendation

If you are developing custom Data Manager packages or creating custom logic, contact SAP product support to ensure that your changes can be supported.



Note

BPC does not support the extension of functionality using code—based interfaces (as in an application programming interface, for example). You can, however, modify your Data Manager packages and custom logic through standard BPC tasks. Supported packages and custom logic are not affected by system version upgrades.

Business users create reports, templates, published books, and transformation files in the production system. You can refresh your test system from production with backup and restore. Remember that security profiles transfer as well, so make any necessary modifications after the restoration.

In some cases, you may want to incrementally move artifacts. For example, you might need to do this if there are other parts of the system also moving from development through test to production. If so, follow the procedures described in this section, switching the source and target environments.

Establishing the right business processes is an essential step to ensuring that system component transport is both compliant and efficient. BPC customers have typically instituted a **change request** system, leveraging existing change request systems. Users, developers, and testers can request the move of specific named artifacts from one environment to another. An assigned system operator is responsible for executing the change request and notifying the requestor that the artifact has

been moved. Once the requester has verified that the correct artifact has been moved properly, the change request is completed.



Recommendation

A change request system can be implemented in any number of ways (including email, for example). However, we recommend that you use a robust request management system.



Note

Migrate dimension and security changes to the production environment first (if these changes are not implemented first, logic, data loads, and reports may not work appropriately).



Caution

For more information about using proper testing procedures to mitigate risks when modifying the production environment, see *Test Environment Usage* [page 28].

4.1 Transport and Change Management

This section provides tips for incrementally moving information from a BPC development environment to a BPC production environment. It also discusses proper testing procedures to mitigate risks when modifying the production environment. Note that these are recommended procedures and could require modification based on individual environments.

4.1.1 Test Environment Usage

The purpose of having a development environment is so that change requests can be thoroughly tested in an environment that is nearly identical to production, without interrupting the daily use of BPC. With this in mind, the test process should include, but not be limited to, the following:

- Ensure that the test environment is synchronized with the production environment (including items such as dimensions, data, templates, and logic) before starting the testing. By providing a comparable baseline of information, this assists with troubleshooting should the testing not produce the desired result. For example, if the test is to enhance performance on logic, the data should be synchronized. Then after the improved logic runs, the data should correspond to what it was before the changes.
- Test in steps. Do not make all the changes at once. Test logic on small subsets of data. Change the hierarchy in pieces. Modify reports bit by bit. This allows for trouble shooting of any issues that arise during the test.
- The final test should duplicate what happens in the production environment. For example, the tests are performed on logic. The logic has been verified to work on a small subset of data (one

month and one category), but is run for a larger set on production (full year and one category). Make sure to run the test for the full year so that you know how the system reacts under more realistic conditions. A full year could max out memory or CPU or run a lot longer than expected based on your monthly run.

- When you increase the number of tests run in the test environment, you improve the accuracy of your risk assumptions in the production environment.
- When running data validation tests, make sure to test not only that the changes have returned the expected results based on modifications, but also that data that should not be affected by the change truly was not. For example, if there was a logic change to calculate a new account. First, validate that the new account was calculated correctly. Then make sure that existing reports tie out as before.

4.1.2 Dimension Updates

Dimension files are *.xls files in the x:\BPC_home\WebFolders\AppSet\AdminApp folder on the server. Dimension files have the same name as the dimension name. The security file is named Users.xls. Considerations when migrating Dimension and Security updates to production are:

- Make sure the new file is in sync before modifying it.
- Always make backups before moving the files.
- If using the NEWID field to change a member name, make sure to make this change again, manually in production, rather than just copying the tested file over the production file. Using the NEWID field ensures that all data in the Fact Tables is converted to the new name. Overwriting the name in the ID column does not trigger this change in the Fact Tables.
- If adding properties, make sure to add those properties prior to Validating and Processing the dimension.
- If modifying security, make sure the data access security is appropriate for the target environment. Sometimes there is different security access assigned on development and production.
- After *Validate and Process* of the updated dimensions, make sure the advanced and default logic files are updated as appropriate. Some advanced and default logic files include a filter called *XDIM_MEMBERSET. This filter dynamically creates a list of dimension members each time the file is saved. The list is updated when the file is saved (not on dimension *Validate and Process*). For example, if there is an *XDIM_MEMBERSET that selects all base level accounts (the Default Currency Conversion, DefaultTranslation.lgf has this) and a base level account (which is not calculated) is added, the filter needs to be refreshed. Therefore, if a base level account is added, all logic with a filter (as described) should be saved again.

4.1.3 Security Profile Updates

If there are changes to dimension structures being transported, the data access security profiles should also be updated. You should consider the following items, in regard to this process:

- By default, there is no access to secured dimension members unless otherwise specified.
- In most environments, the use of Team Profiles simplifies the assignments of rights.

4.1.4 Logic File Migration

There are three types of logic within BPC: advanced formulas, dimension formulas, and report formulas. Advanced and dimension formulas have Excel (*.xls) and logic files (*.lgf) associated with them. The last involves formulas in reports and/or input schedules. When looking to move logic within BPC we are referring to Advanced Formulas or Dimension Formulas. All Advanced formulas are stored in the `x:\BPC_home\WebFolders\<AppSet>\AdminApp\<AppName>` folder on the server. Dimension formulas are stored in the dimension sheets in the Formula column. Dimension sheets are found in `x:\BPC_home\WebFolders\<AppSet>\AdminApp`. Compiled dimension formulas are located in `x:\BPC_home\WebFolders\<AppSet>\AdminApp\dimension` formula.

BPC Advanced Formulas logic has the following file structure:

File Extension	Description
.xls	These files include default.xls, and zero to many *.xls files for each application that contain advanced formulas. Default.xls contains the default logic. To create and design these files, choose eAdmin → Manage Formulas .
.lgf	These files are text files that are created from the logic statements in column A of the *.xls files. In some cases where expert logic is needed, you can create LGF files. These are included in the *.xls files. In this case, no XLS file is associated with the LGF file.
.lgl	These are library files that are included in other logic files.
.lgx	These are compiled logic files. Compiled files are the files that are actually run by the SQL and Analysis Services logic engines. Things to consider when moving logic: <ul style="list-style-type: none"> ■ Before modification, make sure the files to be modified are in sync on production. ■ Make a backup of the production logic files (*.xls, *.lgf, *.lgx, *.lgl). ■ Make sure to move any associated files (that is, those files that are included in the file being moved) with the logic being moved. Logic files have the following statement if they do include another logic file: <code>*INCLUDE LogicFilename.*</code> ■ Ensure that all dimension have been updated before moving logic. ■ Overwriting the tested files with the development files is acceptable. ■ Save each file moved in the appropriate order. Appropriate order means that some files should be saved before others. For example, the Default logic includes Default Translation. Default Translation should be saved before Default. Always save the file included in the current logic file before the current logic file. Only files that have been changed need to be resaved, unless there are dimension changes. For more information about migrating dimensions, see <i>Dimension and Security Updates</i> [page 29].

4.1.5 Data and Data File Migration

Data file loading is typically tested during implementation, and whenever there are structural changes to the data. It is not necessary to run every data load through the test environment before loading data files.

Changes to data file structures to be loaded into BPC should first be tested in the test environment. Once these tests are complete, they can be moved to the production machine. You can move data files to the production server using the *Download data file* and *Upload data file* options in Data Manager. You should consider the following items when moving these files:

- Make backup copies of the production files before the move.
- Moving the data files does not load the data to the server.

Occasionally data in the database needs to be moved from one server to another. This would be the situation if the data to be moved was loaded through an input schedule or is not encompassed in one data file. To move data from one server to another:

1. Use an export Data Manager package to extract base level data from the test server.
2. Use an import Data Manager package to load the data on production.



Recommendation

Use Data Manager to import and export Data Manager packages. Do not perform a direct table-to-table copy of data from one server to another. This requires highly trained SQL expert capabilities and can easily lead to corrupted data.

4.1.6 Transformation and Conversion File Migration

Changes to transformation and conversion files should first be tested in the test environment. Once these tests are complete, they can be moved to the production machine. Transformation and Conversion files are located in several places, depending on whether the files apply to a specific site or the entire company. For files that are applicable to the company, look in the Data Manager folder directly under the Application folder:

[X:\BPC_home\Webfolders\<AppSet>\<Application>\Data Manager\TransformationFiles](#)

[X:\BPC_home\Webfolders\<AppSet>\<Application>\Data Manager\ConversionFiles](#)

For site-related files, look in the Data Manager folder directly under the Site Name folder in the Sites directory under the application:

[<Path to Application folder>\Sites\<SiteName>\Data Manager\TransformationFiles](#)

[<Path to Application folder>\Sites\<SiteName>\Data Manager\ConversionFiles](#)

When moving these files, ensure that the following steps have been completed:

- Before modification, make sure the files to be modified are in sync.

- Make backup copies of the production files before the move.
- When moving the transformation and conversion files make sure to copy the filename.xls and the filename.CDM or filename.TDM file for each type of file. The xls and the CDM (Conversion XML) and TDM (Transformation XML) files are required for the transformation logic to work.

4.1.7 Data Manager Package Migration

Data Manager packages are stored on the server. If you modify or create a package on the test system, it is necessary to move the package to production. Data Manager packages can be stored in two locations:

- Microsoft SQL Server
- Separate files



Recommendation

Store Data Manager packages as separate files, since these can be backed up with the rest of the AppSet.



Note

To migrate data packages, you must have access to both the source and target servers.

4.1.8 Moving Microsoft SQL Server-Based Data Manager Packages

1. In Enterprise Manager on the server, choose ► *Start* → *Programs* → *Microsoft SQL Server* → *Enterprise Manager* ⚡.
2. Choose ► *Data Transformation Services* → *local packages* ⚡.



Note

The source package is located in this window.

3. Open the source package in design mode.
4. Choose ► *Package* → *Save As* ⚡. The package can be saved directly to the target server from this location or it can be saved as a Structured Stored File (*.dts) and copied to the target server. Once it is moved it can be opened on the production server in Enterprise Manager and saved.



Note

A package cannot be saved with the same name as an existing package. Before moving the file, rename the existing package on the target server.

5. If the package you are adding is new, you will need to add it to Data Manager. For more information, see the <http://service.sap.com/instguidescpm-bpc> Release 7.0 → SAP BPC 7.0 Data Manager Guide ↩.

4.1.9 Moving File-based Data Manager Packages

1. Locate the package files (*.dts):
 - For company-related files, look in the Data Manager folder directly under the *Application* folder:
[X:\BPC_home\WebFolders\<AppSet>\<Application>\Data Manager\PackageFiles](#)
 - For site-related files, look in the Data Manager folder directly under the Site Name folder in the Sites directory under the application:
[<Path to Application folder>\Sites\<SiteName>\Data Manager\PackageFiles](#)
2. Copy the package file to the corresponding location on the target server.



Note

A package cannot be saved with the same name as an existing package. Before moving the file, rename the existing package on the target server.

3. If the package you are adding is new, you will need to add it to Data Manager. For more information, see the <http://service.sap.com/instguidescpm-bpc> Release 7.0 → SAP BPC 7.0 Data Manager Guide ↩.

4.1.10 Report, Input Schedule, and Book Migration

Reports, Input Schedules and Books are located on the server at this location:

[x:\BPC_Home\WebFolders\<AppSet>\<AppName>\Excel](#)

They are simple Excel files or templates. They should be moved from test to production and the paths should be identical. If these are site-specific reports and input schedules, add them to the appropriate site location.

The books in Excel are templates. The html or pdf books must be republished on the production system.

4.1.11 Content Library Republication

The system indexes BPC content in the Content Library when it is posted. That index is unique to the environment in which it is posted. If you move a library content document to a new environment, the indexes that reference the document are not updated. It is therefore a better idea to republish these documents on the production server than to try to move them. Additionally, as users can create these types of items, it is more difficult to ensure that the version on development is in sync with production.



Note

The above guideline does not apply when you move the entire AppSet from development to production (SQL Database, OLAP Cube, WebFolders, and FileDB).

4.2 Support Packages and SAP Notes Implementation


SAP Business Planning and Consolidation Support Packages are available on the Software Download Center of the Service Marketplace (SMP). Each Support Package is tied to an individual SAP Note. A description of the Support Package and the installation instructions are included in the note. Support Packages are cumulative, meaning that each subsequent Support Package contains fixes from all prior Support Packages since the last major release. For example, BPC 7.0 SP04 also contains fixes included in BPC 7.0 SP01, SP02, and SP03. You must install the preceding major release before installing a Support Package.

Support Packages are typically installed on the application server. If a client update is required, we provide an SMS package so you can push the client software to users, so no downtime is necessary. SAP BPC 7.0, version for the Microsoft Platform does not support SAP Solution Manager Maintenance Optimizer or the SAP Note Assistant at this time.

5 Troubleshooting

5.1 BPC Version Information

To effectively troubleshoot BPC, you must determine your current version of the system. You can use one of the following methods to determine your version of the system:

- When using client-based subcomponents of the system (such as BPC for Office), click the user name in the *Session Information* section of the Action Pane. The version is found in the dialog box that is displayed.
- When using the Server Manager, examine the System Information dialog box (this appears when the Server Manager is first started). See the <http://service.sap.com/instguidescpm-bpc> 7.0, *version for the Microsoft Platform* → *SAP BPC 7.0 Server Manager Guide* .
- When using BPC Web, click *About BPC 7* in the footer section of any BPC Web page.

5.2 Troubleshooting Client Issues

This section lists client issues that you may encounter, as well as suggestions for troubleshooting and resolving the problem:

Problem: You receive an *Out of memory* exception error while running logic.

Analysis: You may have large data regions and are running out of memory.

Solution: Increase your memory setting on the COM+ object. See the Setting '3GB Support' for Memory on the COM+ Object topic in the BPC 7.0 M Configuration Guide.

Problem: Marginal text and buttons in BPC dialog boxes are unreadable or incorrectly formatted.

Analysis: Determine the DPI font settings in the host computer.

Solution: On the *Settings* tab in the Microsoft Windows *Display Properties* dialog box, choose *Advanced*. On the *General* tab, ensure that the *DPI setting* is **96 DPI**.

Problem: When adding multiple users at one time, you receive an error message that the license has expired.

Analysis: This is due to an outdated version of the license file.

Solution: Use the following procedure to replace the license file:

1. Back up your old licence file:
 - a) Rename the license file.

- b) Place the file in this location: `x:\<BPC_Home>\Webfolders\admintemplates`
2. Obtain a new license file using the following procedure:
- a) On the <http://service.sap.com/swdc> Web page, choose ► *Download* → *SAP Installations & Upgrades* → *Entry by Application Group* → *SAP Application Components* → *SAP Business Planning and Consolidation* → *SAP Business Planning and Consolidation 7.0* → *Installation* → *BPC User License* ◀



Note

Be sure to use **SAP** as the company name in the `TBLServerDefaults` table (see below).



Recommendation

Always use the *Install ID* feature when adding or removing users.

Problem: Unable to add more than a total of five users to the system.

Analysis: This is due to an outdated license file.

Solution: Replace the license file (see above).

Problem: Unable to add or remove user license files (1).

Analysis: This can be due to the lack of a necessary entry in the `TBLServerDefaults` table.

Solution: In the Server Manager, choose ► *Databases* → *AppServer* → *Tables* → *tblServerDefaults* ◀. Enter **SAP** as the company name.

Problem: Unable to add or remove user license files (2).

Analysis: This can occur when Connect wizard version is out of sync with the Server Manager version.

Solution: Reinstall the Server Manager or the client applications, as needed. See *BPC Version Information* [page 35].

Problem: Unable to add or remove user license files (3).

Analysis: You can not add or remove users when there is a version mismatch between the Server Manager and BPC Administration.

Solution: Reinstall BPC Administration.

5.3 Troubleshooting EVDRE

The following list contains BPC problems that you may encounter, as well as suggestions for troubleshooting and resolving the problem:

Problem: There is a problem when retrieving information from the Web Server.

Analysis: This error can occur when you are accessing large spreadsheets.

Solution: Refresh the data (repeat if necessary). If refreshing does not correct the error, log out of BPC, log back in, and retry.

Problem: The EVDRE_Log.txt log file contains the following error message: -2147467261 - Object reference not set to an instance of an object

Analysis: This error can be resolved using AppSet parameters.

Solution: In BPC Administration, add the following AppSet parameter: **DO_COMPRESS**. Set the value to **0**.

Problem: A report using an EVDRE function is not importing the proper data on a given workstation.

Analysis: This is due to a corrupt /system32/zlib.dll file on the workstation.

Solution: Remove and reinstall BPC for Office on the workstation. Copy the zlib.dll file from a properly functioning workstation.

Problem: An EVDRE template crashes Excel (when you try to expand it) after a version upgrade.

Analysis: This is caused by the inclusion of extraneous spaces in BPC formulas.

Solution: Review your formulas and remove all extra spaces. For example, the following formula caused this problem (prior to the removal of extra space) when used in a production system: **=IF (ISERROR (#)**

Problem: Unable to change the Installation or System ID login credentials.

Analysis: This can not be changed using BPC.

Solution:

To change the user name and password, use the following procedure:

1. Log in to Microsoft SQL Server.
2. Choose ► *Databases* → *Appserver* → *tables* → *tbl.serverdefaults* ◀.
3. In the *SysAdminID* column, enter the new user name.
4. In the *UserPassword* column, enter the new password.
5. In Component Services, choose ► *Components* → *EverestAdminMakeHir* → *Properties* → *Identity* ◀. Enter the user name and password that you created in step 2.
6. Repeat step 5 for the following components: *OsoftAdminProcessSelectorManage*, *OsoftContent*, *OsoftDatabaseUSER*, *OsoftDMTools*, *OsoftInsightReportManager*, *OsoftOLAP2000Admin*, *OsoftOLAP2005Admin*, *OsoftUserManage*, *Ev4JournalSvr*, *OsoftAdminLogic*, *OsoftAdminServer*, *OsoftDatabaseAdmin*, *OsoftDatabaseService*, *OsoftFileMange*, *OsoftInsightServiceShared*, *OsoftReportManage*, *OsoftStatusManage*, *OsoftWebFileManage*, *Everest Update*, *K2Processing*, *OsoftAdminLogicManage*, *OsoftAudit*, *OsoftDatabseSYSADMIN*, *OsoftDMserver*, *OsoftInsightKPIManager*, *OsoftLogging*, *OsoftScheduling*, *OsoftSystemConfig* and *OsoftWebFolderSvr*

5.4 Troubleshooting in Data Manager

The following list contains Data Manager problems that you may encounter, as well as suggestions for troubleshooting and resolving the problem:

Problem: Unable to add a new package to the system.

Analysis: This needs to be accomplished using Microsoft SQL Server.

Solution:

To add a package, use the following procedure:

1. Open Microsoft SQL Enterprise Manager on the BPC server.
2. Create a copy of your package (save it using another name).
3. Move the package to the following location:
[<BPC_HOME>\webfolder\appset\application\sites\sitename\datamanager\packagefiles\](#)
4. Choose ► *eData* → *Open Organize Package List* ◀
5. Click *Add Package*, select the new package, and save your changes.
6. Choose *Manage site user package access*.
7. Select the new package, and save your changes.

Problem: Unable to clear the status of a package that did not complete

Analysis: The status can be changed using Microsoft SQL Server.

Solution:

To clear the status of a package that did not complete:

1. Open Microsoft SQL Enterprise Manager on the BPC server.
2. In the AppSet in which the package was executing, clear the package from the `tb1DTSLOG` table.

Problem:

Unable to run Data Manager packages.

This can occur after you choose *eData* and the system prompts you to refresh the data. One of the following error messages can occur:

Can't download the dimension list from the server. An error occurred while getting a server information.

An error occurred while getting server information.

An error occurred while getting a team list from the server.

Analysis:

This can occur for a number of reasons:

- The `SendGovernor` may not be responding properly.
- The system may be low on resources (such as memory).
- There may be a problem with system COM+ Components or IIS.

Solution:

To resolve this issue, complete the following steps:

- Restart the `OsoftSendGovernor` service.
- Restart each of the OutlookSoft COM+ components.
- Restart IIS.

Problem: Unable to save changes to conversion or transformation files on the server after validating and saving them from the client computer. The system indicates that the file has been successfully saved. However, new files do not appear on the server, and modifications to existing files are not reflected.

Analysis: This occurs when client workstation *Environment Variables* are incorrectly set.

Solution: Modify the TEMP and TMP environment variables to reflect the [C:\TEMP](#) folder on the local workstation.

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6 Support Desk Management

6.1 Remote Support Setup

The SAP Support team supports you throughout the entire lifecycle of your solutions, from the business blueprint through configuration to production operation. It provides central access to tools, methods, and preconfigured content that you can use during the evaluation, implementation, and productive operation of your systems. SAP can provide remote support for your BPC implementation using the following components:

- **SAProuter:** SAProuter is an SAP program that acts as an intermediate station (proxy) in a network connection between SAP systems, or between SAP systems and external networks. SAProuter controls the access to your network (application level gateway), and, as such, is a useful enhancement to an existing firewall system (port filter). SAProuter runs on the firewall host serving and serves as the entry point to your network. SAProuter can be used to open a support connection from SAP to your SAP system. SAP support personnel can use the connection use to access your system. SAProuter controls and monitors these connections. You must specifically grant access to the requestor for each connection. For more information about SAProuter, see the following SAP Notes: [1072324](#) and [812732](#).
- **SAP Service Desk:** You can use the Service Desk component to process your internal support messages. You can forward these messages to SAP Support. In this scenario, your internal support desk acts as the first level of BPC support and escalated tickets go directly to SAP Support. For more information about the Service Desk, see ► <https://service.sap.com/runSAP> → *RunSAP Roadmap* → *Access Roadmap* → *Design Operations* → *End User Support Concept* → *Incident Management* ◀.

6.2 CA Wily Introscope Integration

To enable application analysis (including performance monitoring and root cause analysis), CA Wily Introscope (IS) is integrated into SAP Solution Manager Diagnostics (SMD). SAP provides CA Wily IS instrumentation for SAP BPC, as of product version 5.0.

IS for Microsoft .NET is an application management solution for managed .NET applications, running on Microsoft's Common Language Runtime (CLR) environment. CA Wily IS offers dashboards for performance and stability analysis. In addition, the Investigator provides a detailed view on all applications and environment metrics reported by the IS agent to the IS Enterprise Manager, which is the CA Wily IS server and part of SAP Solution Manager.

To enable IS for BPC, install and configure the .NET IS agent on the SAP BPC application server hosts. Metrics, which are known as **tracers** in Probe Builder Directives .pbd files, define the information that is collected at runtime. The .NET IS agent collects this information from the applications and the CLR. The Enterprise Manager stores the Metrics reported by the connected .NET IS agents. You can view performance metrics using the IS Workstation client or the WebViewer application.



Note

The Investigator view is available in the WebViewer.

Refer to SAP Note [1126554](#) for more about information about setting up and configuring IS for SAP BPC. For general information about the installation, configuration, and use of SAP Solution Manager Diagnostics, visit the SAP Service Marketplace at <http://service.sap.com/diagnostics>.

6.3 Problem Message Handover

Problem messages can be logged at SAP Support Portal, located on SAP Service Marketplace, which is located here: <http://service.sap.com/>.

You can use component strings to direct your BPC-related support message:



Note

It is not necessary to use component strings to use the support portal. However, they can reduce processing time, since their use removes the need for SAP Support to dispatch your message to the appropriate BPC support personnel.

The EPM-BPC-MS component string applies to BPC as a whole.

BPC Administration (EPM-BPC-MS-ADM)

Component String	Area
EPM-BPC-MS-ADM-CNS	Admin Console
EPM-BPC-MS-ADM-OTH	Other
EPM-BPC-MS-ADM-WEB	Web Administration

Audit (EPM-BPC-MS-AUD)

Component String	Area
EPM-BPC-MS-AUD-MA	Manage Audit
EPM-BPC-MS-AUD-REP	Audit Reports

Comments (EPM-BPC-MS-COM)

Component String	Area
EPM-BPC-MS-COM-OTH	Comments (other)
EPM-BPC-MS-COM-SR	Comments (send/retrieve)

BPC for Excel (EPM-BPC-MS-EXC)

Component String	Area
EPM-BPC-MS-EXC-DM	Data Manager
EPM-BPC-MS-EXC-JRN	Journals
EPM-BPC-MS-EXC-MNU	Custom Menus
EPM-BPC-MS-EXC-OTH	Other
EPM-BPC-MS-EXC-SR	Send/Retrieve

BPC for PowerPoint (EPM-BPC-MS-PPT)

Component String	Area
EPM-BPC-MS-PPT-OTH	Other
EPM-BPC-MS-PPT-SR	Send/Retrieve

BPC for Word (EPM-BPC-MS-WRD)

Component String	Area
EPM-BPC-MS-WRD-OTH	Other
EPM-BPC-MS-WRD-SR	Send/Retrieve

Server Manager (EPM-BPC-MS-SVM)

Component String	Area
EPM-BPC-MS-SVM-BKP	Backup/Restore
EPM-BPC-MS-SVM-DIA	Diagnostic
EPM-BPC-MS-SVM-OTH	Other

Solutions and the API Toolkit

Component String	Area
EPM-BPC-MS-SOL	Solutions
EPM-BPC-MS-API	API Toolkit

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7 Solution Management Integration

7.1 Registration in the SAP System Landscape Directory (SLD)

The following steps provide the infrastructure for the registration of SAP BusinessObjects Business Planning and Consolidation in the SAP System Landscape Directory (SLD).

This procedure sends your system information (such as product version, components, and hardware information of the host, for example, number of CPUs and memory size) to SLD. This is done through an HTTP post request to the SLD server.



Note

Each time you upgrade to a new support package you must register again to the SLD.

Prerequisites

You have Business Planning and Consolidation 7.0 SP03 or later installed.

Procedure

1. In the `\<BPC Server path>\Server Management\SLD\` folder, open a command prompt and execute the following command:
BPCSLDReg.bat
2. Enter the following HTTP connection information at the prompts:
 - User name of the SAP System Landscape Directory communication user
 - Password of the SAP System Landscape Directory communication user
 - Server host on which the SAP System Landscape Directory is deployed and running
 - HTTP port on which the SAP System Landscape Directory is listening
3. Enter **Y** (yes) to the questions about writing the information to the `slddest.cfg` file and creating the `slddest.cfg.key` file.
These files provide the connection information to the SAP System Landscape Directory server. Every time you register a local system, this connection information is used.
4. To verify a successful data transfer, log on to the SLD server, and go to ► *Landscape* → *Technical Systems*. ◀
Follow the link, and verify whether a Technical System on your host is created. The tab *Installed Products* in the Technical System Details section on the same page displays your installed SAP BusinessObjects Business Planning and Consolidation product and the corresponding product version.

Typographic Conventions

Example	Description
<Example>	Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, “Enter your <User Name> ”.
▶ <i>Example</i> → <i>Example</i> ◀	Arrows separating the parts of a navigation path, for example, menu options
Example	Emphasized words or expressions
Example	Words or characters that you enter in the system exactly as they appear in the documentation
http://www.sap.com	Textual cross-references to an internet address
/example	Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web
123456	Hyperlink to an SAP Note, for example, SAP Note 123456
<i>Example</i>	<ul style="list-style-type: none"> Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options. Cross-references to other documentation or published works
Example	<ul style="list-style-type: none"> Output on the screen following a user action, for example, messages Source code or syntax quoted directly from a program File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE
EXAMPLE	Keys on the keyboard

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