2.3	**Check whether your system started correctly. To do this, log on to your SAP system and call the process overview. Compare the list of processes at operating system level with the process overview in the SAP system.**
	Log on to your SAP system. The process overview (*Tools → Administration → Monitor → System Monitoring → Process Overview*, Transaction SM50) displays a list of work processes of the instance to which you are logged on. The dispatcher and all work processes are visible at operating system level as *disp+work.exe.* An assignment can be made using the process ID.
	Part 2 (Optional): Start and Stop with a Command Call
3	**Stopping the SAP System**
3.1	**Log on to the server with the user *<sid>adm* through a *Telnet* connection.** Use the tool specified by the instructor to create a *Telnet* connection to your server. Log on with the user `<sid>adm` and password `<sid>adm`.
	Check whether your SAP system is running at operating system level. To do this, run the command `tlist /t| more`, to display an overview of operating system processes.
3.2	**Enter the command `stopsap` to stop an instance. To stop the entire SAP system, first stop the dialog instance and then the central instance.**
	The command `stopsap` only stops the selected instance. If the database is to be stopped, this must be done using database tools.
	Enter the command `stopsap` to stop an instance.
	stopsap syntax: `stopsap name=<SID> nr=<Instance No.> SAPDIAHOST=<Server name>`
	To stop the entire SAP system, first stop the dialog instance and then the central instance.
4	**Starting the SAP System**
4.1	**Start the SAP instances by entering the command `startsap`. Start the central instance first and then the dialog instances.**
	Start the SAP instances by entering the command `startsap`.
	startsap syntax: `startsap name=<SID> nr=<Instance No.> SAPDIAHOST=<Server name>`
	Start the central instance first and then the dialog instances.

Introduction to System Configuration

SAP

1. Overview

2. Basics

3. Starting and stopping the system

4. **Introduction to system configuration**

5. Technology components for Internet connection

6. Access to Help

7. Basics of database administration

8. System landscapes and transport requests

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Introduction to System Configuration

Contents:

- **How the system evaluates its parameters**
- **How to set system parameters**
- **Setting up operation modes**

Objectives:

At the conclusion of this unit, you will be able to:

- **Determine the configuration of system parameters**
- **Adjust the system parameters using profiles**
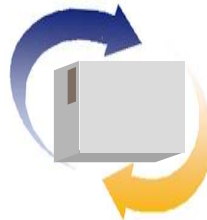- **Set up a dynamic switch of work process types using operation modes**

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Assigning System Parameters

SAP

Instance profile

<SID>_<Instance>_<Host name>

Default profile

DEFAULT.PFL

**Sequence
in which the values for
the profile parameters
are read**

- ● **SAP Kernel**

- ● **For example, NT System
environment variables**

- ● **For example, NT Registry
environment variables**

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- ■ The configuration of the individual instances and therefore of the SAP system is performed using system parameters. The default values for these parameters are defined in the program code of the kernel.

- ■ You can change these default values using the profile files, which are read when an instance is started. These profile files are created during the installation of the system and can also be edited later.

- ■ As the profile files are only read when the system is started, you must restart the instance or the entire system after changing parameters.

- ■ Dynamic switching (while the system is running) is only possible for a small number of system parameters.

Profile Files at Operating System Level

SAP

Installation
R3SETUP

Operating System

Start Profile

Default Profile

Instance Profile

Global Profile Directory
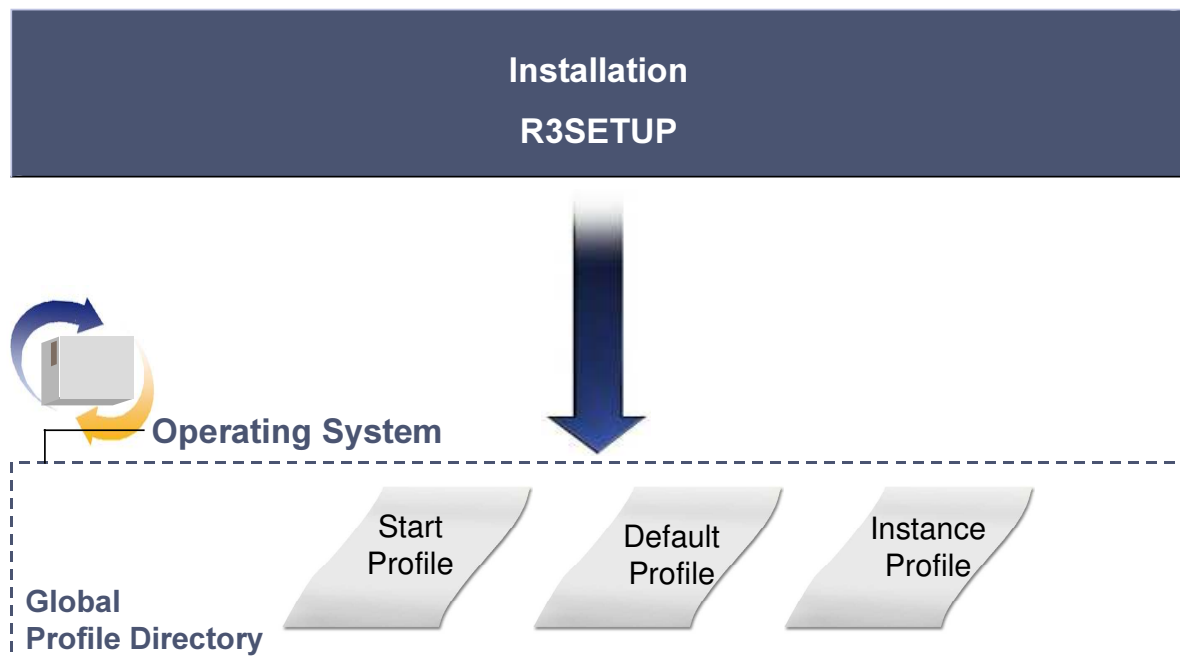
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- The profile files are automatically created during installation. After installation is complete, the profile files are stored at operating system level in the directory: *\usr\sap\<SID>\SYS\profile*. This directory can be read by all instances of an SAP system using the share or mount technique.

- The SAP system has three system profiles. These are:

  - Start profile

  - Default profile

  - Instance profile

- In principle, you can change these files with operating system resources (editors). In doing so, the user must ensure himself or herself that the changes are performed correctly. Incorrectly set parameters can lead to the system not starting. Change the profile parameters using the resources in the SAP system that are presented on the following slides.

Profile Files: Overview

SAP

Start
Profile

Processes to be started

START<Instance><Instance number>_<Host name>

Default
Profile

**Global parameters that
apply to all instances**

DEFAULT.PFL

Instance
Profile

**Parameters that apply
to one instance**

<SID><Instance><Instance number>_<Host name>

For example: <SID> = <DEV>, <Instance> = <DVEBMGS00>, <Instance number> = <00>, <Host name> = <twdf1000>

- The instance-specific start profile (START<instance><instance number>_<host name>), specifies for each instance which processes are to be started. For example, these are the message server and the dispatcher.

- There is only one default profile (DEFAULT.PFL) for each SAP system, and it is read by all instances. It contains system-wide settings, such as the system name, the name of the database server, the name of the enqueue server, or also the default logon client.

- The instance profile (<SID>_<instance><instance number>_<host name>) defines parameters that apply for one instance, such as the number and type of work processes, or the definition of the size and allocation of the main memory area used by the SAP system, and is therefore instance-specific.

RSPFPAR

rdisp/wp_no_dia

RZ11

**Profile
Parameters
for the System**

```
...
rdisp/wp_no_dia
rdisp/wp_no_btc
rdisp/wp_no_spo
...
```
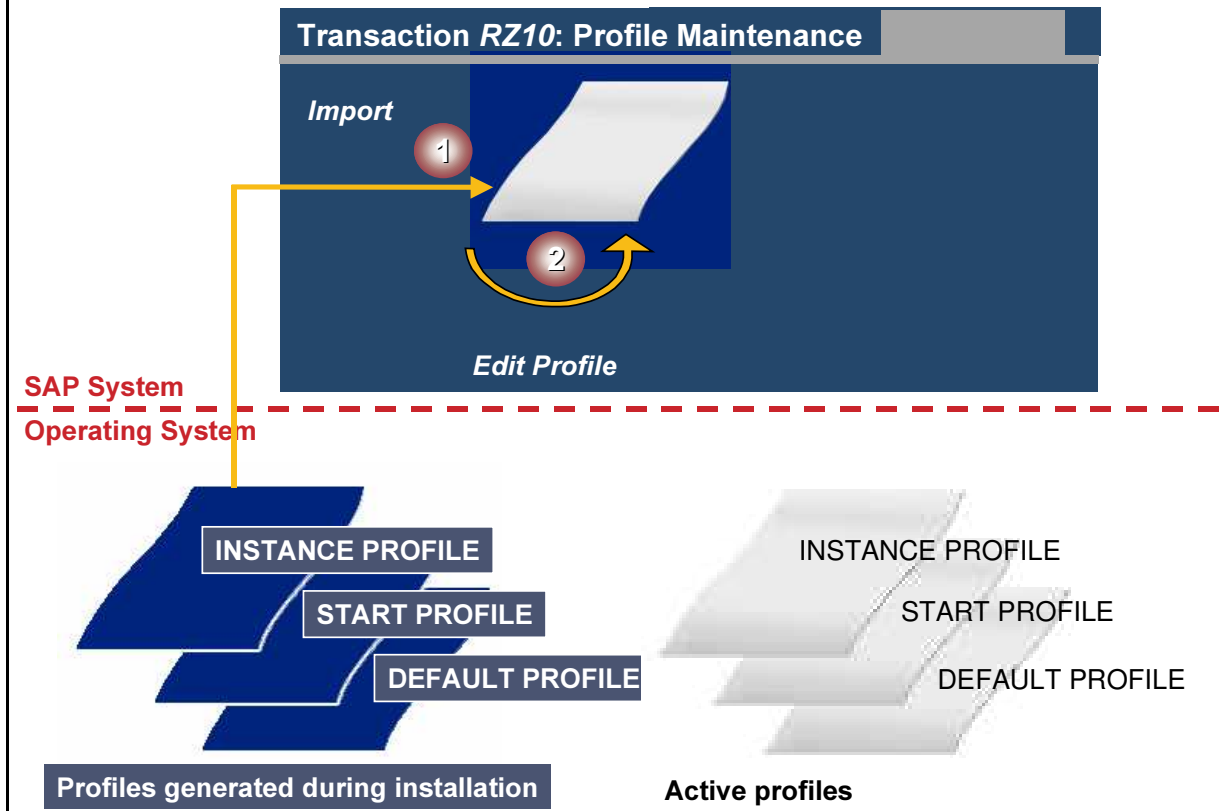
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- The current values of the system parameters can be displayed in the system by report RSPFPAR and transaction RZ11. Both functions display the system parameters for the instance to which the user is currently logged on. The report RSPFPAR displays a list of all instance-specific system parameters, along with the parameters that apply system-wide. You can restrict this list to specific parameters. A table displays the system default value for the individual parameters, as it is defined in the program code of the kernel, and, if the default value has been overridden by a profile parameter, the user-defined value. A short description and, if required, documentation for the parameters can also be displayed. Transaction RZ11 displays information and documentation for individual profile parameters. It also displays whether the parameter can be changed while the system is running with the *Dynamically Switchable* indicator.

- Outside the SAP system, you can display the values of the profile parameters at operating system level using the user <sid>adm with the program *sappfpar*. You can display the current value of a parameter with *sappfpar <parameter name>*. The command *sappfpar all* returns a list of all parameters. You can check the parameters that are set using *sappfpar check*. The command *sappfpar help* returns a short overview of possible options.

- You can also specify an instance profile, an instance number, or the SAP system name with this command using the option *pf=<instance profile>, nr=<instance number>*, or *name=<SID>*.

SAP System
Profile Administration with Transaction *RZ10*

Start Profile

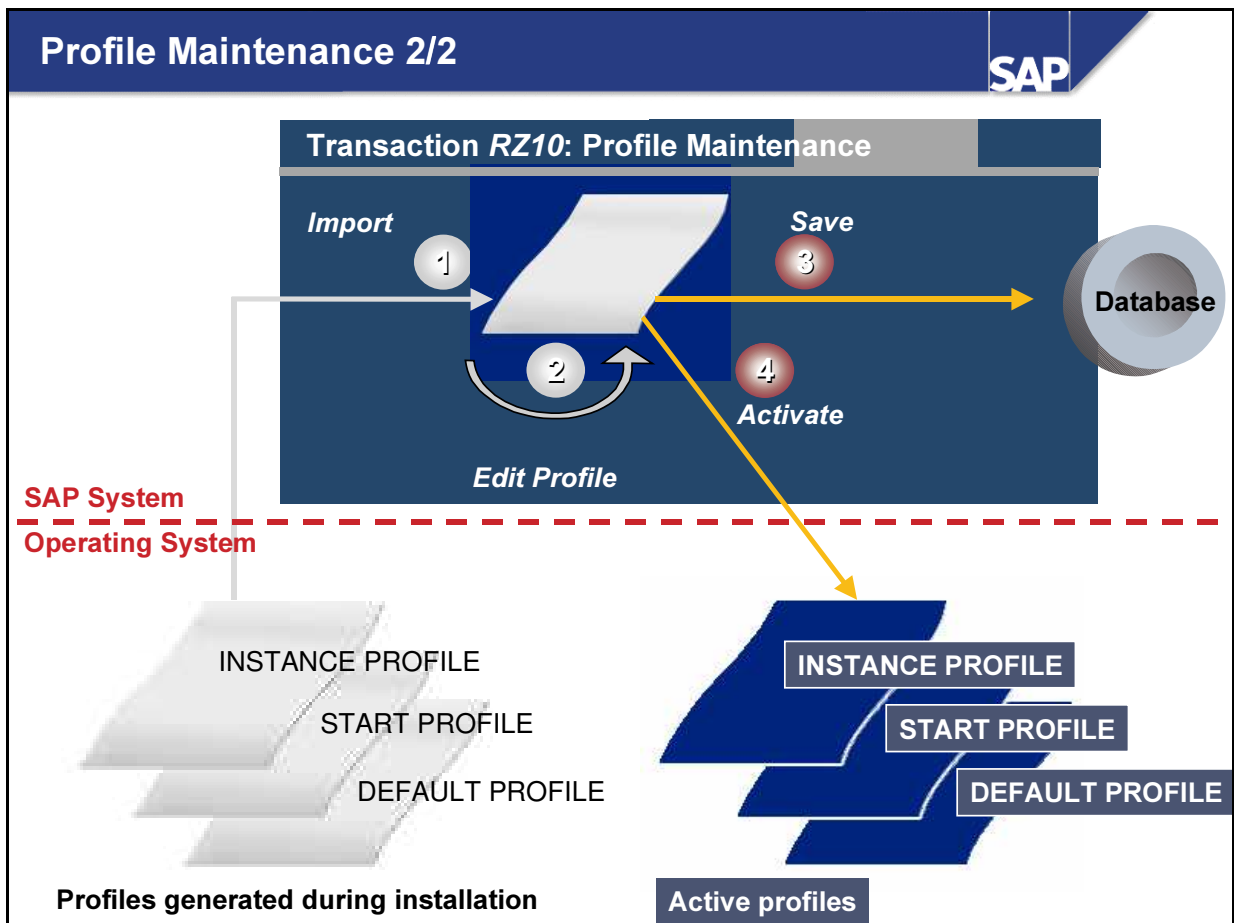Default Profile

Instance Profile
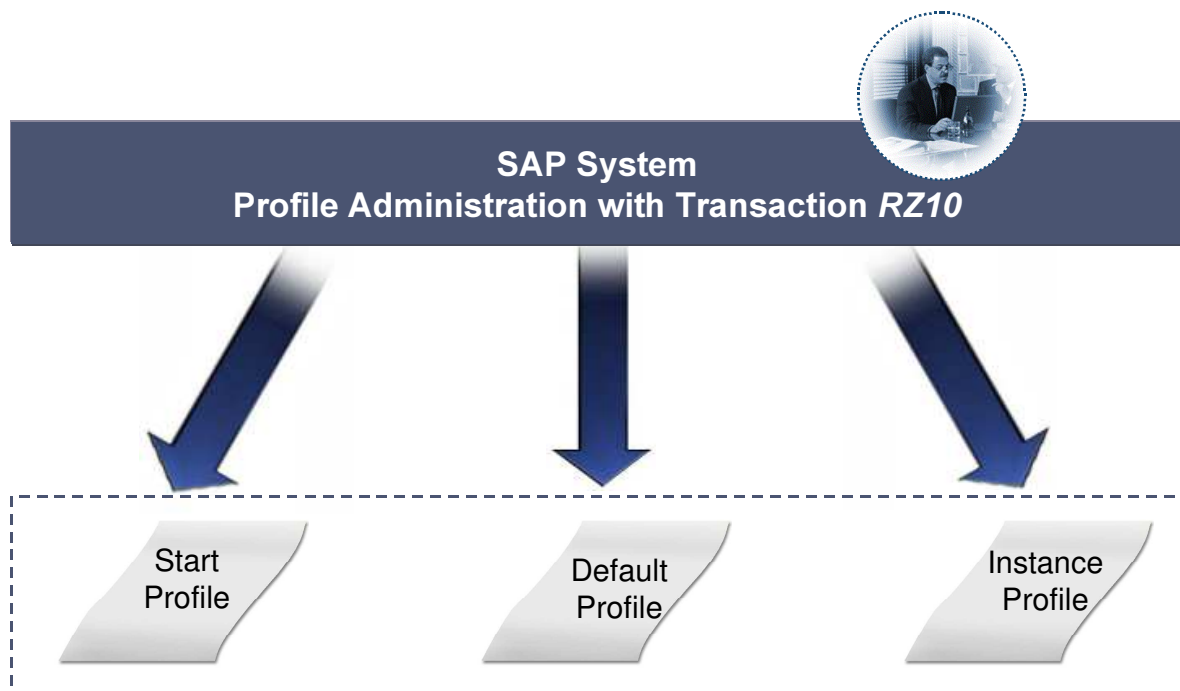
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- If you want to change profile parameters, you can make these changes using operating system-specific editors. However, this procedure has certain dangers, as the user must ensure himself or herself that the changes are performed, and also documented, correctly. Incorrectly set parameters can prevent an instance from starting. The SAP system therefore provides integrated profile administration and parameter maintenance.

- Profile administration in the SAP system offers the following advantages to the user:

  • Central administration and maintenance of the instances.

  • Changes in profiles are checked for consistency.

  • Administration of multiple versions of a profile.

  • Comparison of the actively used profile and the profile stored in the database.

  • Immediate activation of selected parameters.

Profile Maintenance 1/2

SAP

Transaction *RZ10*: Profile Maintenance

Import

1

2

Edit Profile

SAP System
Operating System

INSTANCE PROFILE

START PROFILE

DEFAULT PROFILE

INSTANCE PROFILE

START PROFILE

DEFAULT PROFILE

Profiles generated during installation

Active profiles

■ After installation, the profile parameters are only present at file level. To be able to use the profile administration of the SAP system, the profiles must be imported into the database. During this import, the system performs a consistency check and a check of the way in which the parameters interact. Changes to profile parameters can then be performed in the SAP system, with the previously mentioned advantages. These are then stored in the database, and written back to file level. These changes only take effect when they are read by the system (at a restart of the system).

■ Perform the administration and maintenance of profiles in transaction *RZ10*. In the first step, you import the profiles into the database by choosing *Utilities → Import Profiles → Of active servers*. After selecting the profile to edit, you can change individual profile parameters. There are three different levels for maintaining the profiles. The administration data contains the type of profile (start, default, or instance profile), a short description, the path of the file, the name of the instance, and the time of the last activation. You can perform the maintenance of the parameters of the individual profiles through either basic maintenance or extended maintenance. Basic maintenance allows you to adjust the most important parameters and supports the user through the use of logical descriptions. Extended maintenance displays the unformatted content of the profile (the technical names of the profile parameters). In extended maintenance, you can not only change the values of individual parameters, but also add new parameters and delete existing parameters.

Profile Maintenance 2/2

SAP

Transaction *RZ10*: Profile Maintenance

Import

① ② ④

Save

③

Activate

Edit Profile

Database

SAP System
Operating System

INSTANCE PROFILE

START PROFILE

DEFAULT PROFILE

INSTANCE PROFILE

START PROFILE

DEFAULT PROFILE

Profiles generated during installation

Active profiles

- The changes are stored in two steps. In the first step, the changes are temporarily copied when you choose *Copy*. In the second step, the values are permanently saved to the database when you choose *Save*. The changes are therefore successfully saved to the database and must now be written at operating system level. This is done either automatically during saving by confirming the relevant query or manually from the menu by choosing *Profile → Activate*.

- Changes to instance-specific profiles take effect after a restart of the corresponding instance. Changes to the default profile take effect only after a restart of all instances in the entire system.

- Changes to these files are the exception rather than the rule.

SAP

Transaction *RZ10*: Profile Maintenance

Check individual profile

Check all profiles

Instance Profile

Start Profile

Database

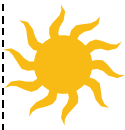Operating System
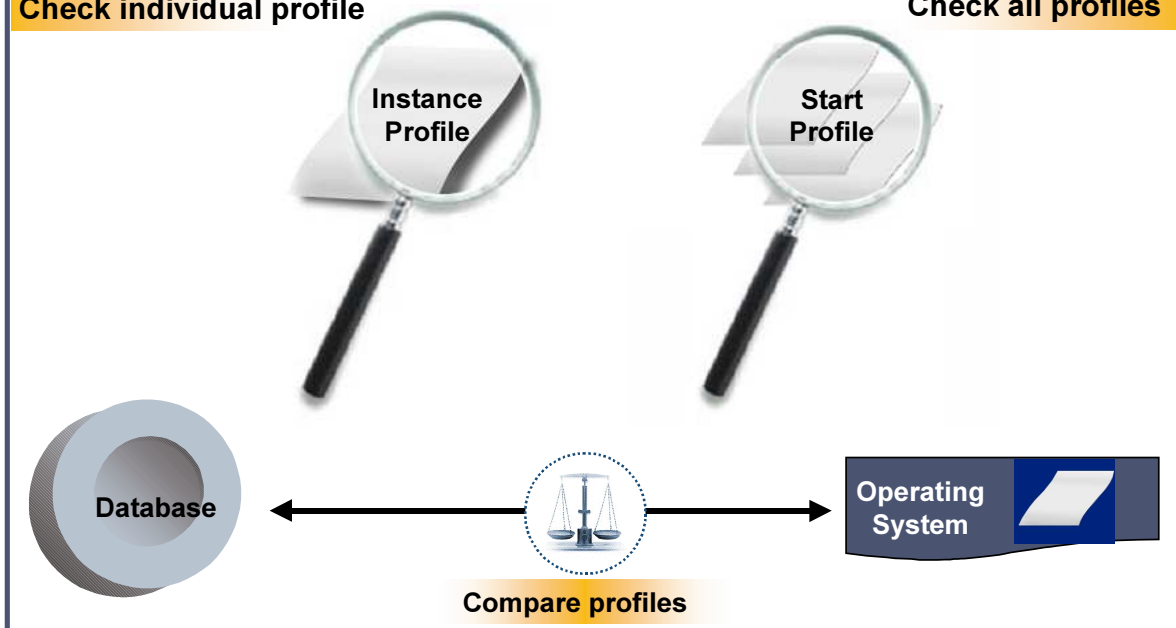
Compare profiles

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- Additional functions available in transaction *RZ10* are the consistency check and the comparison of profiles.

- During a consistency check, the system checks the syntax and the semantics for an individual profile or for all profiles.

  - The *all profiles* option also contains a consistency check between the profiles of a type. For example, the system checks for the start profile whether only one message server is being started for each system.

- During the comparison of profiles, the system compares the profile that is in active use with the profile stored in the database. This comparison is automatically performed when an instance is started. If the system identifies a difference between the active profile and the profile stored in the database, it displays a message in the Alert Monitor.

NIGHT

DAY

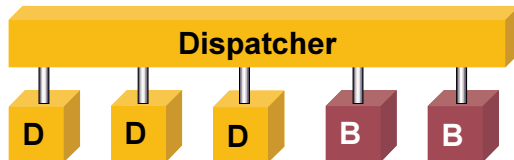**Background processing**

Dialog processing

BTC

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- The demands of users on the SAP system vary during the course of the day. During the day, a large number of dialog users, who want to be served with high performance by the system, are working. Therefore, a large number of dialog work processes should be available for users during the day. During the night only a small number of these dialog work processes are used, and the system can be used to a larger extent to process background jobs.

- The type and number of work processes for each instance is defined in the profiles. The distribution of work processes in the profiles is optimized for fast dialog response times; that is, there are usually many dialog work processes and a small number of background work processes. This means that during the night, system resources, such as the main memory, are tied to the dialog work processes, or are not fully utilized by the background processes, such as the CPU. It is therefore practical to define different types and numbers of work processes for these different demands on the SAP system. This is realized through the concept of operation modes.
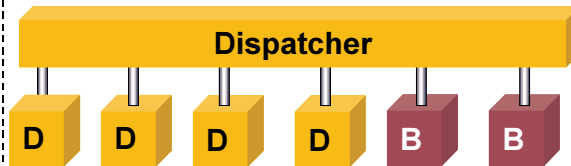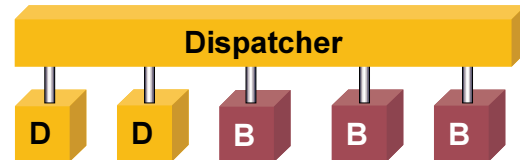
Adjusting Instances to the Load Distribution

SAP

Operation Mode: Day

Instance 1

Dispatcher
D D D B B

Instance 2

Dispatcher
D D D D B B

Operation Mode: Night

Instance 1

Dispatcher
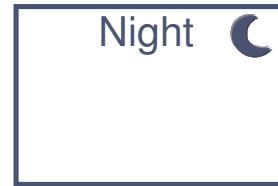D D B B B

Instance 2
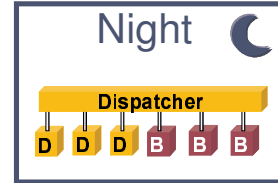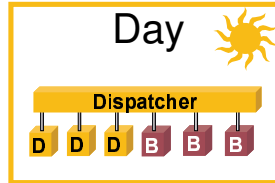
Dispatcher
D D B B B B

© SAP AG 2002
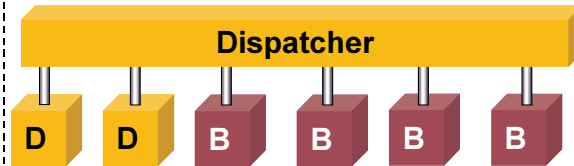
- Using the operation modes, you can adjust the type and distribution of the work processes to the varying load distribution during the day. You can also adjust the distribution of the work processes to business requirements that only occur once. By defining operation modes, you can change not only the total number of work processes defined in the profiles, but also the type and distribution of the individual work process types within this total number. The switch between the work process types is performed dynamically during the runtime of the SAP system. The switch is triggered using a defined schedule. A reserved work process is not immediately terminated, but marked for switching. This means that certain delays may occur. This type change is logged in the system log.

- During the switch of the operation modes, neither the instance nor the affected work processes need to be restarted. This means that the quality of the buffer of the SAP system is retained during an operation mode switch, and that the request that is currently being processed by a work process is completed. The individual work processes retain their process ID after the switch, which can be observed in the process overview (*SM50*).
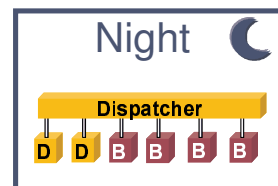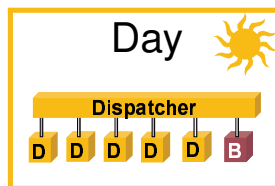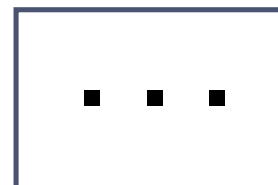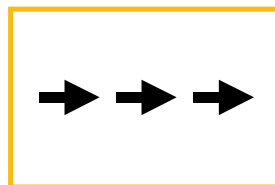
Setting Up Operation Modes

SAP

	Day ☀	Night 🌙
Create operation mode:	Day ☀	Night 🌙
Set up distribution of the work processes using instance definition:	Day ☀ — Dispatcher — D D D B B B	Night 🌙 — Dispatcher — D D D B B B
Adjust distribution of the work processes:	Day ☀ — Dispatcher — D D D D D B	Night 🌙 — Dispatcher — D D B B B B
Define time plan:	➤ ➤ ➤	■ ■ ■

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- The operation modes are set up in a number of steps.

  - First, the operation modes are created as empty containers in transaction *RZ04*.

  - Next, all active instances of the system are recorded and the work processes defined in the instance profile are assigned to the operation modes as default values.

  - You can now make allocations for the individual operation modes in the total number of work processes taken from the instance profile. The allocation should be made primarily between the dialog and background work processes.

  - You then specify the periods for which the operation modes are valid and when the switch between the operation modes should occur, in the time table *(SM63)*.

Scheduling Operation Modes

SAP
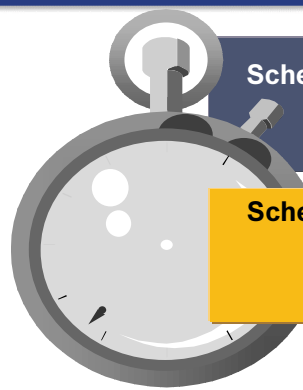
| Schedule for normal operation | 08.00 - 21.00 | Operation Mode: Day |
| | 21.00 - 08.00 | Operation Mode: Night |

| Schedule for exception operation | 1st May | |
| | 15.00 -17.00 | Operation Mode: Exception |

| Night | Day | Night | **30 April** |

| Night | Day | | Day | Night | **1 May** |

00.00   08.00   15.00 17.00   21.00   23.59
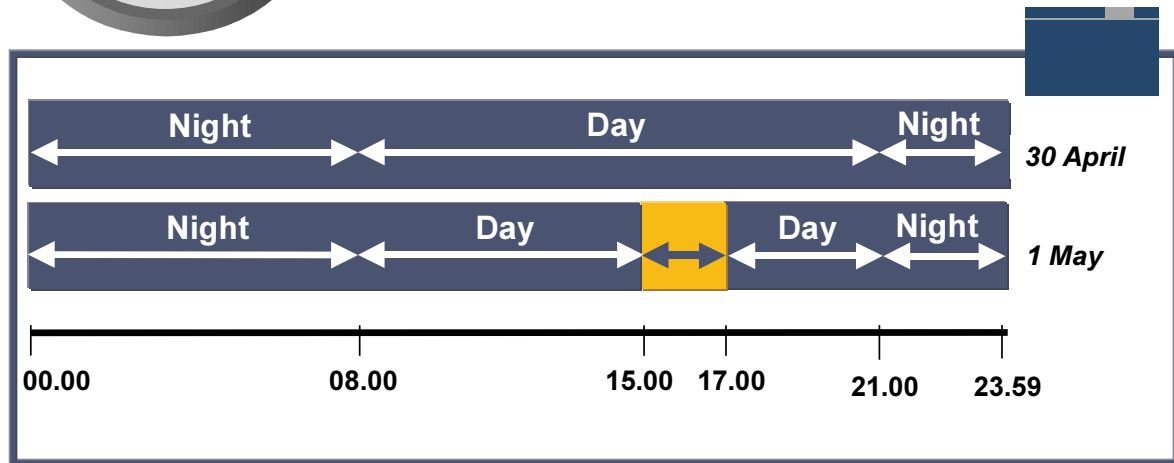
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- The timetable (*SM63*) differentiates between normal operation and exception operation. A general time definition that applies almost all of the time is set using normal operation. In rare cases, in which a special distribution of the work processes for unusual system loads is required, these are defined using exception operation.

- If you do not define a timetable for normal operation, no switch of operation modes is made. The configuration in the instance profile remains active.

- The exception operation can only be defined as a unique event.

- You can trigger an operation mode switch from a program that you have written yourself using a function module (RZL_PERFORM_BA_SWITCH).

Control Panel

SAP

Instance A

Instance B

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- The Control Panel (*RZ03*) allows you to monitor the instances and the operation modes. It provides functions to:

  - Check the status of all instances and of the operation modes.

  - Start and stop the instances.

  - Manually switch operation mode.

  - Display an overview of the work processes.

  - Switch to the Alert Monitor.

- You can switch the operation mode either for all instances (*Control → Switch operation mode → All servers*) or for a selected instance (*Control → Switch operation mode → Selected servers*).

- You can first simulate the switch of operation modes (*Control → Switch operation mode → Simulation*). The system checks for which instances a switch can be performed.

- You can display a detailed analysis of the status of the individual instances by choosing *Monitoring → Status Details*.

Profile Consistency Checks

Inconsistencies

Operating System — Start and Instance Profile

Database — Start and Instance Profile

Night
Day
Dispatcher
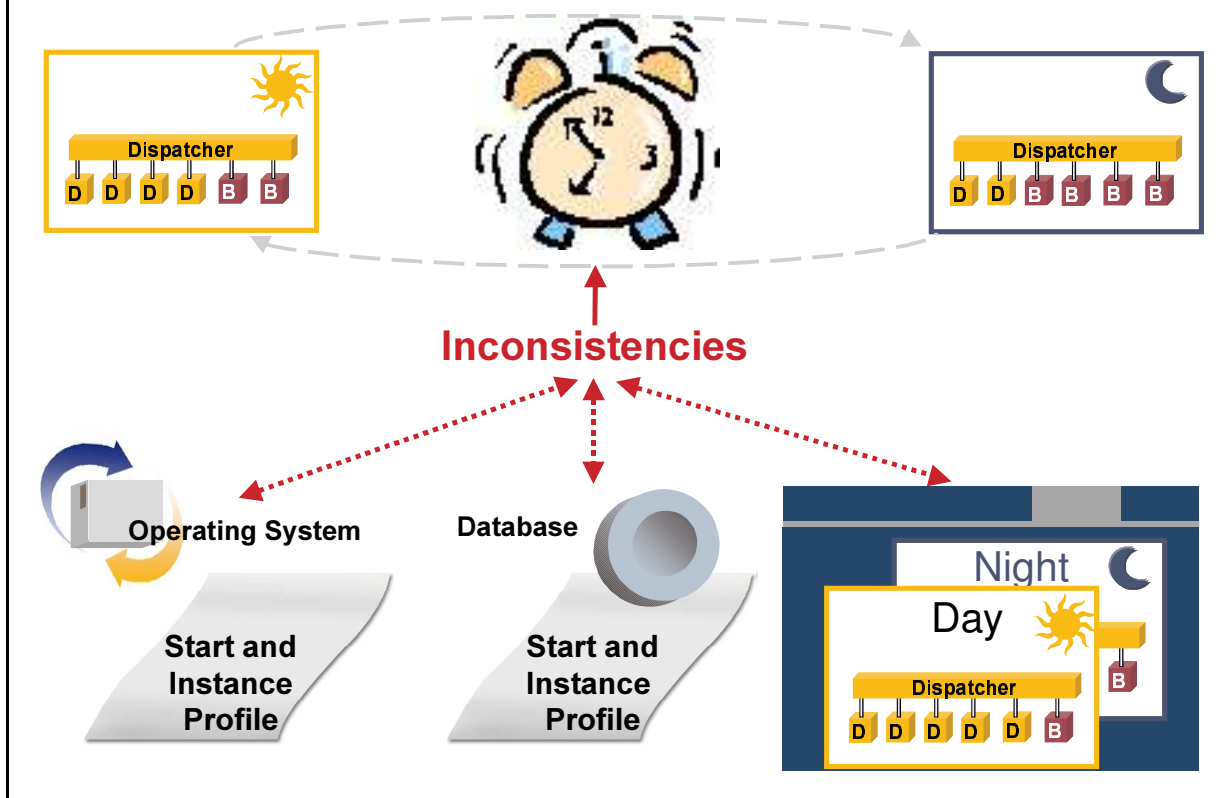
- You can first simulate the switch of operation modes. The system checks for which instances a switch can be performed. If it is not possible to switch between operation modes, this is usually due to inconsistencies in the SAP system. These inconsistencies can occur if the number of work processes is defined differently in different places in the system. These are the instance profile at operating system level, the instance profile in the database, and the definition of the operation modes themselves.

- If, for example, the number of work processes in the profiles is later changed, the system can no longer switch operation modes until after a restart of the instance. It is therefore necessary to adjust the configuration of the operation modes after a change to the profiles.
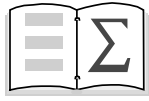
You are now able to:

- **Determine the configuration of system parameter settings**
- **Import and maintain profiles**
- **Set up and schedule operation modes**
- **Control instances using the Control Panel**

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No.	Exercises
1	**Determine values of system parameters**
1.1	Determine the values of the following system parameters:
	Name of the local application server:
	Number of work processes on the central instance: Dialog: Background: Enqueue: Update: Spool:
	Default logon client:
2	**Save profile files**
2.1	Save your runnable profile files in a backup directory. To do this, create a *Backup* directory under *C:\Temp* and copy all profile files to this directory.
3	**Import and maintain profiles**
3.1	Import all profiles into your SAP system.
3.2	Change the values of the following parameters: • Set the value for the default client to the number of your logon client. • Increase the number of dialog work processes for the dialog instance by two. Consider which profiles you are performing changes in. Save and activate your changes.
3.3	Check your changes in the system. To do this, log on to the system again and check the number of work processes in the process overview.
3.4	Check your changes in the profile files at operating system level. What must you still do, so that your changes take effect in the system?
4	**Activate the changed profile parameters**
4.1	Restart the system so that your changes become active.
4.2	Check your changes in the system again. To do this, call the logon screen and check the number of work processes in the process overview.
5	**Create operation modes**
5.1	Create two operation modes: *Day* and *Night*.
5.2	Now create a definition for the work process distribution for all instances of your system.

5.3	Change the distribution of the work processes of your instances for each of the operation modes.
	Note that there must be at least two dialog and two background work processes in all operation modes.
6	**Scheduling operation modes**
6.1	Schedule the operation modes that you have created in the timetable for normal operation.
7	**Manual switch of operation modes**
7.1	To observe the change in work process distribution when the operation mode is switched, switch to the *Night* operation mode manually in the *Control Panel*. How can you observe the change of the work process distribution?

Solutions

| No.	Solutions
1	**Determine values of system parameters**
1.1	**Determine the values of the following system parameters.**
	You can determine the values of system parameters by running the report RSPFPAR. A list of the parameter names follows:
	Name of the local application server: *rdisp/myname*.
	Number of work processes on the central instance: **Dialog:** ***rdisp/wp_no_dia*** **Background:** ***rdisp/wp_no_btc*** **Enqueue:** ***rdisp/wp_no_enq*** **Update:** ***rdisp/wp_no_vb*** **Spool:** ***rdisp/wp_no_spo***
	Default logon client: *login/system_client*
2	**Save profile files**
2.1	**Save your runnable profile files in a backup directory. To do this, create a *Backup* directory under *C:\Temp* and copy all profile files to this directory.**
	Log on to your server in the same way as you did in the exercises for the Starting and Stopping unit. Copy the profile files from the directory *\usr\sap\<SID>\SYS\profile* to the backup directory.
3	**Import and maintain profiles**
3.1	**Import all profiles into your SAP system.**
	Call profile maintenance (*Tools → CCMS → Configuration → Profile Maintenance*, Transaction RZ10). All profile files can be imported together by choosing: *Utilities → Import Profiles → Of active servers.* A check log displays the result of the import.
3.2	**Change the values of the following parameters:** • **Set the value for the default client to the number of your logon client.** • **Increase the number of dialog work processes for the dialog instance by two.** **Consider which profiles you are performing changes in.** **Save and activate your changes.** To change the values of individual parameters, select the corresponding profile (default or instance profile) and change this in basic maintenance. After making your changes, choose *Copy* and then *Save*. Confirm the activation of the profile in the dialog box. You can create new profile parameters in the extended maintenance. You should change the default client in the default profile. Select this profile and change it in the basic maintenance. Copy and save your entries. Check by

	displaying the extended maintenance whether the change of default client is also visible there.
3.3	**Check your changes in the system. To do this, log on to the system again and check the number of work processes in the process overview.** Call the logon screen using SAP Logon. Check the number of processes by calling the server overview (*Tools → Administration → Monitor → System Monitoring→ Servers*, Transaction *SM51*), selecting the dialog instance, and then choosing *Processes*.
3.4	**Check your changes in the profile files at operating system level.** Open the profile files at operating system level with an editor and use this to view the changes that have been made. **What must you still do, so that your changes take effect in the system?** Your changes to profile parameters will only take effect after a restart of the affected instance or the entire system.
4	**Activate the changed profile parameters**
4.1	**Restart the system so that your changes become active.** Log on to your server in the same way as you did in the exercises for the Starting and Stopping unit, and restart the system.
4.2	**Check your changes in the system again. To do this, call the logon screen and check the number of work processes in the process overview.** Log on to the system after a successful restart. Check the default logon client on the logon screen and check the number of work processes in the same way as in exercise 3.3.
5	**Create operation modes**
5.1	**Create two operation modes: *Day* and *Night*.** You maintain operation modes in transaction *RZ04* (*Tools → CCMS → Configuration → Operation Modes/Instances*). You can create operation modes by choosing *Create*. Enter the name and a short description and choose *Save*.
5.2	**Now create a definition for the work process distribution for all instances of your system.** Switch to the *Instances/Operation Modes* view by choosing *Instances/Operation Modes*. You define work process distribution for all instances of your system by choosing *Settings → Based on current status → New instances→ Create*.
5.3	**Change the distribution of the work processes of your instances for each of the operation modes.** **Note that there should be at least two dialog and two background work processes in all operation modes.**

		To change the distribution of the work processes for the operation modes of the instances, double click the operation modes entries. You change and then save the distribution of the work processes in the window: *Maintain Work Process Distribution* by choosing + and -. After you have changed the distribution for all operation modes and instances, choose *Save*.
6		**Scheduling operation modes**
6.1		**Schedule the operation modes that you have created in the timetable for normal operation.**
		You can schedule operation modes using the operation mode calendar (*Tools → CCMS → Configuration → Operation Mode Calendar*, Transaction *SM63*). Choose *Normal Operation* and then *Change*. Select the start and end of the period for operation mode *Day* by double clicking the appropriate lines. Choose *Assign* and then select operation mode *Day*. Follow the same procedure to assign the operation mode *Night*. After you have assigned the entire 24 hour period to your operation modes, choose *Save*.
7		**Manual switch of operation modes**
7.1		**To observe the change in work process distribution when the operation mode is switched, switch to the *Night* operation mode manually in the *Control Panel*.**
		You can perform a manual switch of the operation modes in the *Control Panel* (*Tools → CCMS → Control/Monitoring → Control Panel*, Transaction *RZ03*). In the first step, choose the operation mode to which you want to switch by choosing *Choose Operation Mode*. Select the operation mode and choose *Choose*. The switch is performed in a second step, by choosing *Control → Switch Operation Mode → All Servers*.
		How can you observe the change of the work process distribution?
		Check the changed distribution of the work processes in the process overview (*Tools → Administration → Monitor → System Monitoring → Process Overview*, Transaction *SM50*).

Technology Components for Internet Connection

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Technology Components for Internet Connection

SAP

Contents:
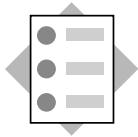
- **Internet scenarios with SAP systems**
- **Internet Communication Manager (ICM)**
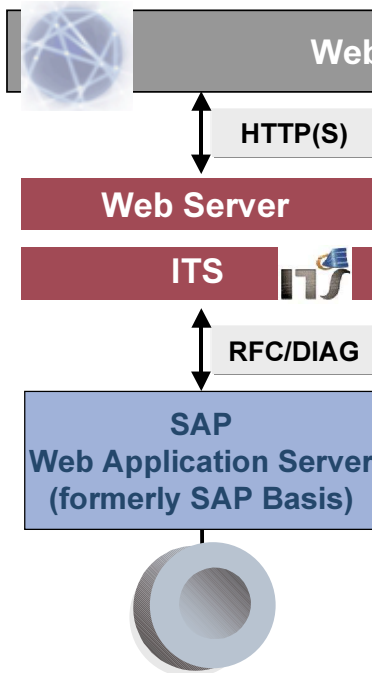- **SAP Internet Transaction Server (ITS)**

Objectives:

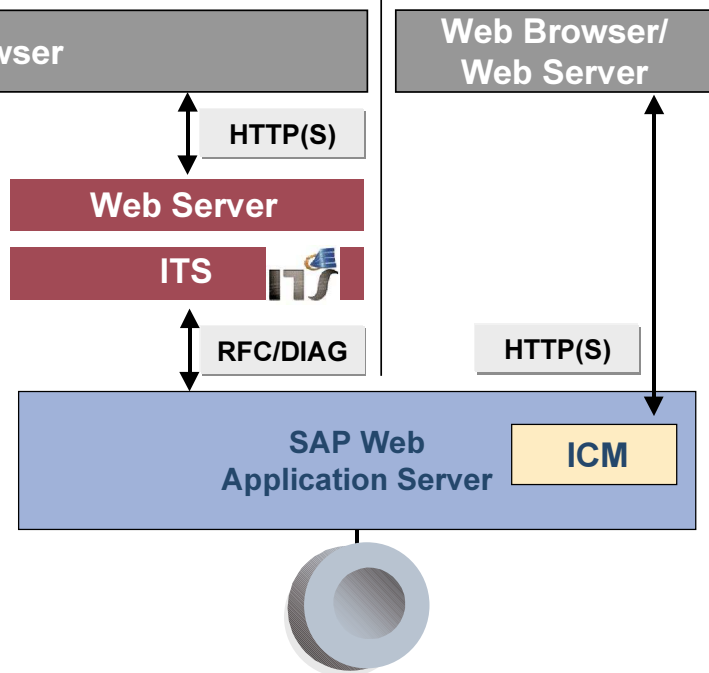At the conclusion of this unit, you will be able to:

- **Describe the application areas of the ICM and the ITS**
- **Configure and monitor an ICM**
- **Perform certain administrative tasks for an ITS**

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Internet Scenarios with SAP Systems

SAP

Existing Web Applications, SAP GUI for HTML   **New Applications**

| Web Browser | | Web Browser/ Web Server |

↕ **HTTP(S)**   ↕ **HTTP(S)**

| Web Server | | Web Server |

| ITS | | ITS |

↕ **RFC/DIAG**   ↕ **RFC/DIAG**   **HTTP(S)**

SAP Web Application Server (formerly SAP Basis)   **SAP Web Application Server**   **ICM**

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- The various options for connecting SAP systems to the Internet are introduced in the SAPTEC course. This unit focuses on the **administration** of the mySAP Technology software components Internet Communication Manager (ICM) and SAP Internet Transaction Server (ITS).

- Based on the highly-scaleable infrastructure, new technologies are implemented as of SAP Web Application Server (SAP Web AS) 6.10 to process HTTP requests (or other protocols) from the Internet (for example, from a browser) directly, or to send them as HTTP client requests into the Internet. To achieve this, the SAP system kernel has been extended with the **Internet Communication Manager** (ICM) process. SAP Web AS builds the technical platform for **new applications**.

- The **SAP Internet Transaction Server** (ITS) provides a gateway between a mySAP.com component and a Web server. Many SAP applications are based on the ITS, which was first delivered in 1996 with SAP R/3 3.1G.

  - The ITS is required for the SAP GUI for HTML, which automatically converts SAP screens into HTML format.

  - The ITS is also used for formatting certain Web applications, called Internet Application Components (IACs).

System Landscape with SAP Web AS: Example

Browser

Browser

Browser

Internet

Intranet

HTTP

Firewall/DMZ

HTTP

SAP Web AS

SAP Web AS

SAP Web AS

System X

System Y

System Z

SAP System

SAP System

HTTP, RFC, BAPI, IDOC

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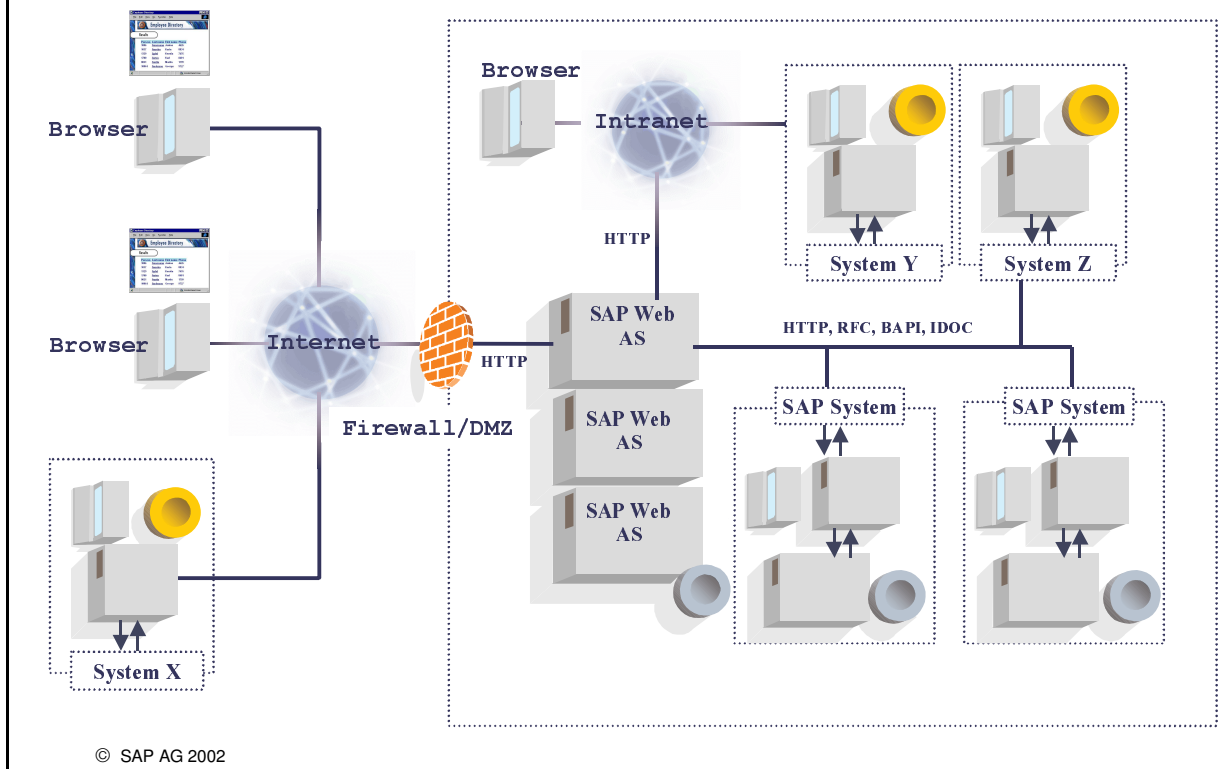
■ The diagram shows an example of a **system landscape** in which Web browsers from the Internet and Intranet are linked to an SAP Web AS (here distributed over multiple servers). Important features are:

- Support for standard Web protocols such as HTTP, HTTPS, WebDAV, SOAP, and SMTP.

- Output of standard Web formats such as HTML, XML, and XLST.

- Complete integration into the SAP environment (development environment, user administration, authorization concept, system monitoring, and communication protocols).

■ The SAP Web AS can function both as a **Web Server** (server role) and as a **Web Client** (client role). This diagram shows the server role, in which the SAP Web AS can accept and process HTTP requests from any Web client (such as a Web browser), and can return an HTTP response to the client.

■ Within a work process, the Internet Communication Framework (ICF) provides the environment for handling HTTP requests. The ICF represents the bridge between the C kernel of the SAP system and the application program.

■ As of SAP Web AS 6.10, work processes can directly generate Web-compatible content that is then passed to a browser through the ICM. Applications with Business Server Pages (BSP), which are developed in the SAP system with a tool of transaction *SE80*, the Web Application Builder, provide one possibility for creating content of this type.

■ For large installations with distributed SAP Web AS instances, incoming HTTP requests can be distributed using Web switches (third-party products). In the future, SAP will deliver its own solution for Web load distribution, the **SAP Web Dispatcher**.

Architecture of the SAP Web AS with ICM
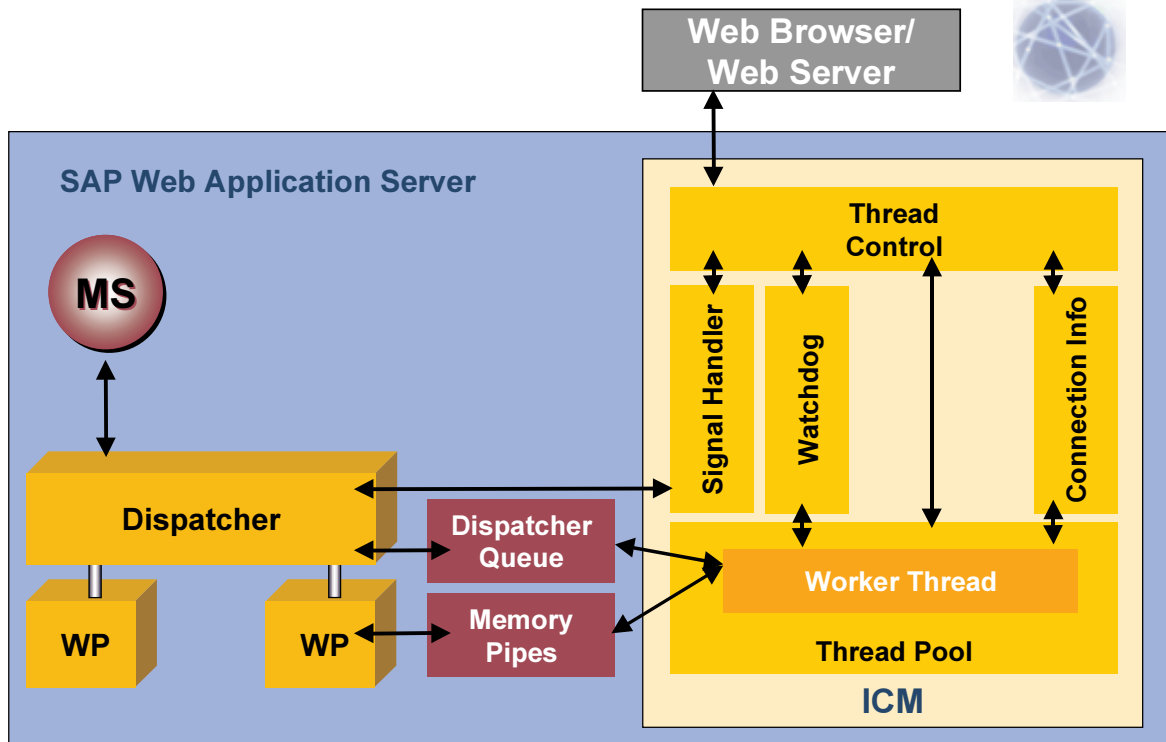
- From a technical point-of-view, the ICM is a **separate** process (*icman.exe* at operating system level) that is started and monitored by the dispatcher. Its task is to ensure that the SAP system can communicate with the outside world (using the HTTP, HTTPS, and STMP protocols). In the server role, it can process requests from the Internet that arrive with URLs with the server/port combination to which the ICM responds. The ICM then calls the appropriate local handler, based on the URL. The ICM procedure uses **threads** to process the generated load in parallel. Threads of the ICM are:

  - **Thread Control**: This thread accepts the incoming TCP/IP requests and creates (or raises) a worker thread from the threadpool to process the request.

  - **Worker Thread**: This thread handles requests and responses for a connection. A Worker Thread contains an I/O handler for the network input and output and various plug-ins for the different supported protocols.

  - **Watchdog**: A worker thread usually waits for a response (whether it is client or server). If a timeout occurs, the watchdog takes over the task of waiting for the response. The worker thread can then be used for other requests.

  - **Signal Handler**: Processes signals that are sent from the operating system or another process (such as the dispatcher).

  - **Connection Info:** Table with information for each existing network connection.

  - **Memory Pipes**: These memory-based communication objects allow data transfer between the ICM and the work processes.
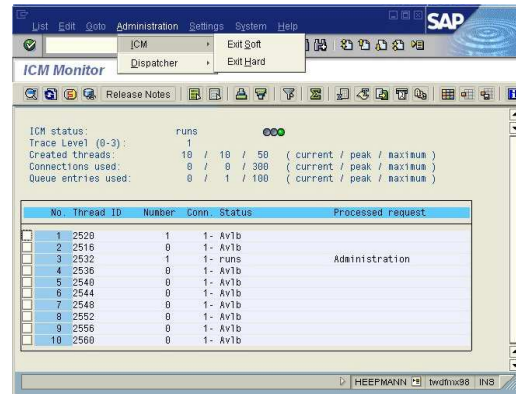
Starting the ICM

SAP

System Start

Evaluation of the profile parameter

rdisp/start_icman

- **Possible values:** *true* or *false*
- **Default:** *true*

Runtime

```
List  Edit  Goto  Administration  Settings  System  Help
                    ICM        ▶  Exit Soft
                    Dispatcher ▶  Exit Hard
ICM Monitor

ICM status:            runs        ●●●
Trace Level (0-3):     1
Created threads:       10  /  10  /  50    ( current / peak / maximum )
Connections used:      0   /  0   /  300   ( current / peak / maximum )
Queue entries used:    0   /  1   /  100   ( current / peak / maximum )

No.  Thread ID   Number  Conn. Status       Processed request
 1   2520        1       1- Avlb
 2   2516        0       1- Avlb
 3   2532        1       1- runs            Administration
 4   2536        0       1- Avlb
 5   2540        0       1- Avlb
 6   2544        0       1- Avlb
 7   2548        0       1- Avlb
 8   2552        0       1- Avlb
 9   2556        0       1- Avlb
10   2560        0       1- Avlb

                                         ▷ HEEPMANN ▾ twdfmx98  INS
```
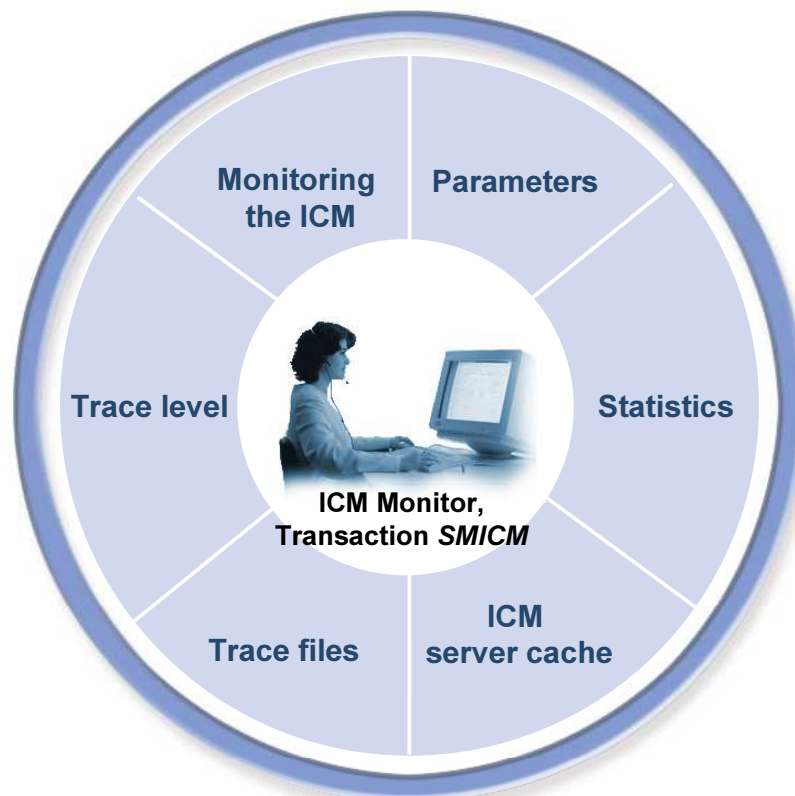
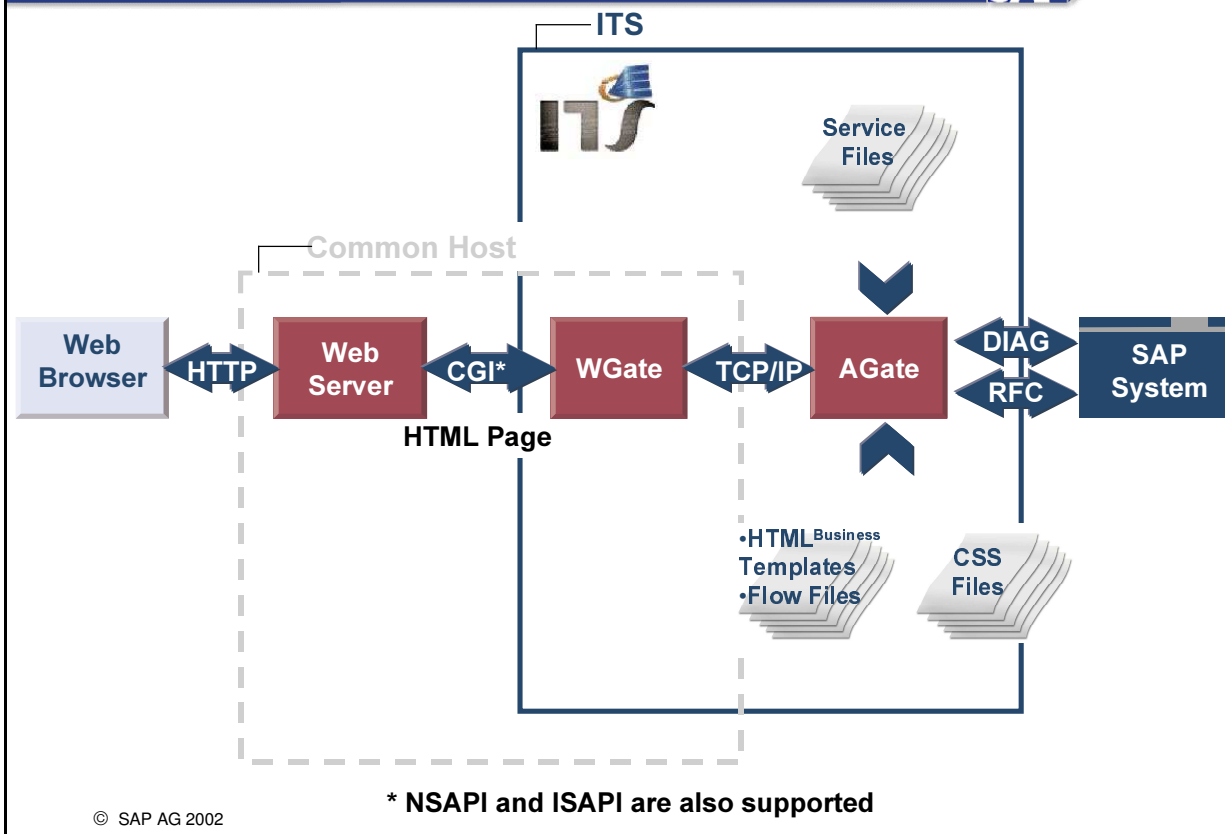**ICM Monitor, Transaction *SMICM***

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- The profile parameter ***rdisp/start_icman*** controls whether an ICM process is also created when an application server is started. If no value is specified, the default setting *true* is used.

- You can quickly obtain an overview of which application servers are running with the ICM in the SAP system, by using the server overview (transaction *SM51*).

- The **ICM Monitor** (transaction *SMICM*) provides more detailed information (such as the thread ID). With this transaction, you can end the ICM with a soft exit (signal two) or a hard exit (signal nine), through the menu option *Administration → ICM*. The dispatcher then starts a new ICM process. If you choose *Administration → Dispatcher → Force ICM restart*, the dispatcher restarts the ICM, if it has terminated due to an error.

Monitoring the ICM with the ICM Monitor

Monitoring the ICM • Parameters • Trace level • Statistics • Trace files • ICM server cache

ICM Monitor, Transaction *SMICM*

© SAP AG

- The most important tool for an administrator in the ICM environment is the **ICM Monitor** (transaction *SMICM*). Some administration activities (all from transaction *SMICM*) include:

  • **Monitoring** and restarting the ICM (see previous page).

  • Setting the **trace level** (*Goto → Trace level → Set*), values from 0 to 3.

  • Evaluating the **trace file** (*Goto → Trace file → Display file*). The system reads the file *dev_icm* from the *work* directory of the current instance.

  • Overview of the **profile parameters** (*Goto → Parameters → Display*). The ICM is configured using profile parameters. The displayed values apply to the instance to which you are currently logged on. You can find documentation for the parameters in transaction *RZ11* and in the SAP Library.

  • You can check how many requests the ICM has processed since it was started (or since the last reset of the statistics) using the **statistics** (*Goto → Statistics → Display).* Details about processing duration are also displayed.

  • Monitoring (*Goto → Server Cache → Display*) and resetting the **ICM Server cache**. The ICM server cache stores HTTP objects before they are sent to the client. The next time that this object is requested by a request, the content can be sent directly from the cache to the client.

- You can determine some of the data referred to above using the program *icmon*. The call *icmon -h* displays the possible parameters.

Architecture of the ITS

SAP

ITS

Common Host

| Web Browser | ◄HTTP► | Web Server | ◄CGI*► | WGate | ◄TCP/IP► | AGate | ◄DIAG►◄RFC► | SAP System |

Service Files

HTML Page

•HTML^{Business} Templates
•Flow Files

CSS Files

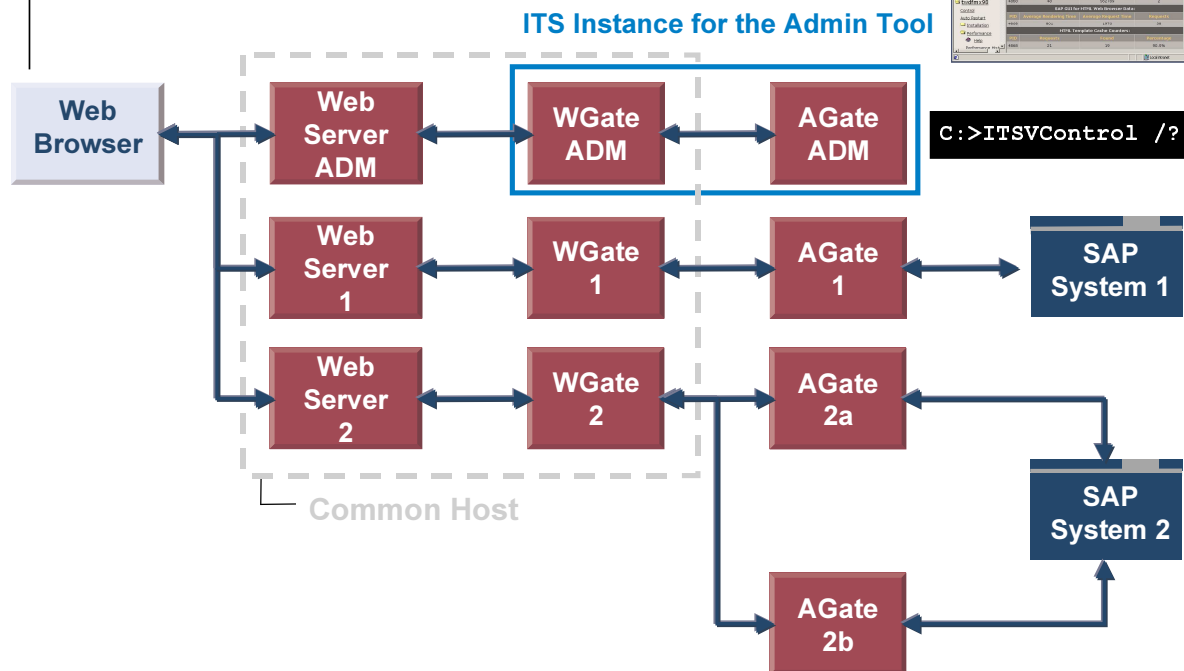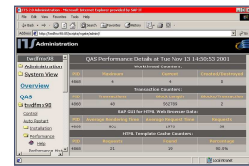*** NSAPI and ISAPI are also supported**

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- The ITS consists of two components: the **WGate** (Web Gateway) and the **AGate** (Application Gateway). A request from a Web browser reaches the Web server using the HTTP(S) protocol. The WGate addressed using the URL, which is always running on the same host as the Web server, passes the request to an associated AGate. Service files (simple ASCII files) on the AGate determine which function is started in which component system. The output is converted to HTML, either in accordance with templates (HTML Business Templates) or dynamically during runtime (such as with the SAP GUI for HTML). Formatting information (such as font, font size, and colors) can be stored separately in Cascading Style Sheet (CSS) files.

- The following conditions apply to the installation of an ITS:

  • Web server and WGate are running on the same host.

  • WGate and AGate can be running together on a the same host (single host) or on separate hosts (dual host).

  • Normally, one component system is addressed by one virtual ITS.

  • Multiple virtual ITS can run on one host.

  • A virtual ITS can consist of multiple AGate instances that can even be installed on different hosts.

  • WGate and AGate are available for various platforms. You can find a list of the currently supported platforms on the SAP Service Marketplace under the quick link */sap-its*.

- We strongly recommend that you work with a current ITS. The ITS is backwards-compatible (see SAP Note 419297) for possible restrictions with ITS 6.10).

Starting and Stopping the ITS

SAP

URL of the admin tool:
http(s)://<server>:<port>/scripts/wgate/admin/!

ITS Instance for the Admin Tool

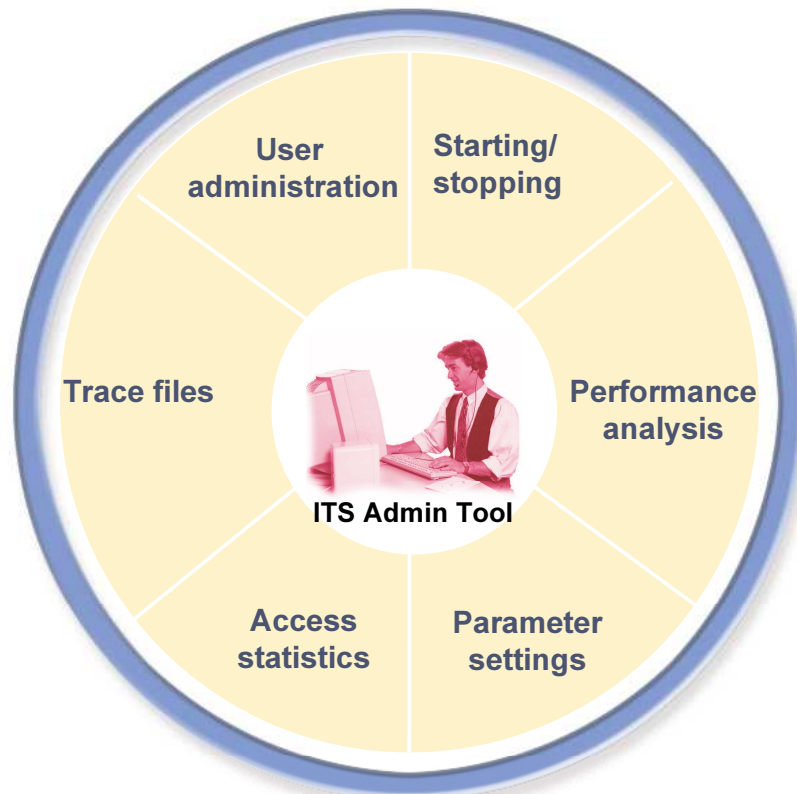| Web Browser | → | Web Server ADM | ↔ | WGate ADM | ↔ | AGate ADM | `C:>ITSVControl /?` |
		Web Server 1	↔	WGate 1	↔	AGate 1	→ SAP System 1
		Web Server 2	↔	WGate 2	↔	AGate 2a	
						AGate 2b	SAP System 2

Common Host

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- How can you, as an administrator, **start and stop** an ITS? It is assumed here that the necessary services (under Microsoft Windows, for example, the required Services) are running for the Web server instances.

- Every ITS instance can be administered from **operating system level**. To do this, use the programs in the *ADMIN* directory (below the ITS directory tree).

- To start and stop an ITS instance, call the program ITSVControl.exe at operating system level. The option /? lists the possible options. Important options are:

  - ITSVControl.exe /c start /v <vits>: Starts the ITS instance *vits*.

  - ITSVControl.exe /c stop /v <vits>: Stops the ITS instance *vits*.

  - ITSVControl.exe /c status /v <vits>: Returns the status of the ITS instance *vits*.

  The status query shows you which ITS components (WGate and/or AGate) are currently running.

- It is more convenient to work with the **Admin Tool**, which allows you to administer ITS instances of remote hosts using a Web browser interface. During the installation process, you have the option of creating a separate ITS instance for the Admin Tool (recommended approach). You call the (started) Admin Tool using a special URL (see graphic). Initially, the user *itsadmin* is provided, with the password *init*. After logging on, you can create other users and assign authorizations to them (for example, restrict them to display functions only).

- You can find the functions for starting and stopping in the *Control* area for each ITS instance.

- As of ITS 6.10, you can also monitor the AGates of a virtual ITS on remote hosts, although with functional restrictions in comparison to the local ITS instances.

Administration of the ITS

SAP

ITS Admin Tool

- User administration
- Starting/stopping
- Trace files
- Performance analysis
- Access statistics
- Parameter settings

© SAP AG

- The most important tool for ITS administration is the **Admin Tool** (see previous page). Among other things, it provides:

  - User administration

  - Configuration of all ITS parameters

  - Start / stop

  - Evaluation of various log and trace files

  - Performance monitoring and tuning

- Using a special agent (SAPCCMSR), you can also monitor an ITS using CCMS analysis monitors (transaction *RZ20*). For additional information, see the SAP Service Marketplace, under the quick link */systemmanagement* (*System Monitoring and Alert Management* area), and SAP Note 418285.

- For more detailed information about the administration of an ITS, see the documentation and training course ITS070 (SAP Internet Transaction Server: Administration).

Additional Information

SAP

- **SAP Library** SAP Web AS → Web Applications (BC-MAS) → SAP Web Application Server → SAP Web AS
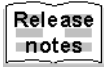
- **Quick Links** */technology* and */sap-its*

- **SAP Notes**

421359	ICM: Binding ports < 1024 on Unix
325616	ITS system requirements
383549	Patch strategy Internet Transaction Server

Technology Components for Internet Connection: Summary

You are now able to:

- **Describe the application areas of the ICM and the ITS**

- **Configure and monitor an ICM**

- **Perform certain administrative tasks for an ITS**

No.	Exercises
1	**Check the ICM Settings**
1.1	How many ICM processes are running in your SAP system?
1.2	Determine the port through which requests in the HTTP protocol are processed for each of your application servers.
1.3	If multiple SAP systems are running on your server, compare your result for exercise 1.2 with the neighboring group. Verify that each ICM process on your server uses a separate port.
1.4	Which release of the ICM is used on the training system?
2	**Simple HTTP Request**

2.1	Call the following URL in your local Web Browser (in the training room):
	
	`http://<Server with path>:<ICM Port>/sap/public/info`
	
	For example:
	
	`http://twdf5000.wdf.sap-ag.de:8001/sap/public/info`
	
	The system should display an XML document with system data.

2.2	Open the ICM monitor and find out how many requests from your Web browser have been processed by Worker Threads (for example, due to a *Refresh* of the URL from exercise 2.1). Note: Note that data in the ICM monitor is instance-specific.
3	**Load test with *icmon* tool (optional)**
3.1	Log on to your server at operating system level.
3.2	Call the command shell (*Start → Run*, and enter **CMD**), and switch to the directory that contains the profile files for your SAP system.

3.3	Start the *icmon* program by specifying an instance profile:
	
	`icmon pf=<Instance_profile_name>`
	
	For example:
	
	`icmon pf=DEV_D11_twdf5000`
	
	You can now generate client requests with the command **g**. Entries:
	
	Host: Your server name (should be predefined)
	
	Path: **/sap/public/ping** (should be predefined)
	
	Port: One of your ICM ports (in the same way as exercise 2.1)
	
	Optional Attributes: **no** (should be predefined)
	
	Number of requests: **5000**
	
	Number of threads: **2**

3.4	You can now observe how the requests generated by *icmon* are processed by the worker threads in the ICM monitor.

4	**Logon to SAP GUI for HTML (optional)**
	Note: *This exercise requires that ITS instances are installed on your server. Your instructor will give you information, such as the correct ports.*

4.1	Call the following URL in your local Web Browser (in the training room):
	
	`http://<Server with path>:<SID ITS Port>/scripts/wgate/webgui/!`
	
	For example:
	
	`http://twdf5000.wdf.sap-ag.de:1080/ scripts/wgate/webgui/!`
	
	Note: Do not forget the "!" character at the end of the URL.

4.2	Log on with your SAP user and start some transactions.
4.3	Which release of the ITS is used on the training system?
5	**Call the Admin Tool (optional)**
	Note: *This exercise requires that ITS instances are installed on your server. Your instructor will give you information, such as the correct ports.*

5.1	Call the following URL in your local Web Browser (in the training room):
	
	`http://<Server with path>:<Admin ITS Port>/scripts/wgate/admin/!`
	
	For example:
	
	`http://twdf5000.wdf.sap-ag.de:1085/ scripts/wgate/admin/!`
	
	Note: Do not forget the "!" character at the end of the URL.

5.2	Log on with the ITS administration user `itsadmin` and password `init`.
5.3	Check the status of your ITS instance (the one with the same name as your SAP system). Restart this instance.

No.	Solutions
1	**Check the ICM Settings**
1.1	**How many ICM processes are running in your SAP system?**
	Count the number of application server for which the process ICM is listed in the server overview (transaction *SM51*).
1.2	**Determine the port through which requests in the HTTP protocol are processed for each of your application servers.**
	Check the value of the profile parameter *icm/server_port_0*, using one of the following methods:
	• Calling the report *RSPFPAR*
	• In transaction *RZ10* or *RZ11*
	• In the ICM Monitor (transaction *SMICM*) by choosing *Goto → Parameters Display.*
1.3	**If multiple SAP systems are running on your server, compare your result for exercise 1.2 with the neighboring group. Verify that each ICM process on your server uses a separate port.**
	If you observe a multiple load: Use transaction *RZ10* to assign a different port to the parameter for the HTTP protocol (usually *icm/server_port_0*) for each of your application servers. Suggested value: *80$$*, where *$$* is dynamically replaced with the instance number.
	You must then restart your SAP system. Verify that the desired ports are now allocated.
1.4	**Which release of the ICM is used on the training system?**
	You can find out the ICM release in the ICM Monitor by choosing *Release Info* (or *Goto → Release Info*).
	The required information is at the beginning of the list. All problems that have been corrected are listed at the end of the list (with associated SAP Notes).
2	**Simple HTTP Request**
2.1	**Call the following URL in your local Web Browser (in the training room):**
	`http://<Server with path>:<ICM Port>/sap/public/info`
	For example:
	`http://twdf5000.wdf.sap-ag.de:8001/sap/public/info`
	The system should display an XML document with system data.
	See exercise text.
	The ICM port may not be accessible from your training room. If this is the case, use the Web browser available on your server.
	Note: All services under */sap/public* use a predefined user; therefore no logon is required for this query.

2.2	**Open the ICM monitor and find out how many requests from your Web browser have been processed by Worker Threads (for example, due to a *Refresh* of the URL from exercise 2.1).** **Note: Note that data in the ICM monitor is instance-specific.** Choose *Refresh* in the ICM Monitor (transaction *SMICM*).
3	**Load test with *icmon* tool (optional)**

3.1 -
3.4
	Log on to your server at operating system level.
	
	Call the command shell (*Start → Run*, and enter CMD), and switch to the directory that contains the profile files for your SAP system.
	
	Start the *icmon* program by specifying an instance profile:
	
	    `icmon pf=<Instance_profile_name>`
	
	For example:
	
	    `icmon pf=DEV_D11_twdf5000`
	
	Switch to the menu by entering m.
	
	You can now generate client requests with the command g. Entries:
	
	Host: **Your server name (should be predefined)**
	
	Path: `/sap/public/ping` **(should be predefined)**
	
	Port: **One of your ICM ports (in the same way as exercise 2.1)**
	
	Optional Attributes: `no` **(should be predefined)**
	
	Number of requests: `5000`
	
	Number of threads: `2`
	
	You can now observe how the requests generated by *icmon* are processed by the worker threads in the ICM monitor.
	
	See exercise text.

4	**Logon to SAP GUI for HTML (optional)**

4.1	**Call the following URL in your local Web Browser (in the training room):**
	
	    `http://<Server with path>:<SID ITS Port>/scripts/wgate/webgui/!`
	
	For example:
	
	    `http://twdf5000.wdf.sap-ag.de:1080/ scripts/wgate/webgui/!`
	
	Note: Do not forget the "!" character at the end of the URL.
	
	See exercise text.
	
	The ITS port may not be accessible from your training room. If this is the case, use the Web browser available on your server.

4.2	**Log on with your SAP user and start some transactions.** Fill out the *Client*, *Login*, *Password,* and *Language* fields on the logon page and choose *Logon*. You can now call transactions using the command field or the SAP Easy Access menu (in the same way as with the SAP GUI for Windows).

		Note: You can completely or partially define the fields on the logon page using ITS parameters. As well as logging on with user and password, the ITS allows you to logon using digital certificates.
	4.3	**Which release of the ITS is used on the training system?**
		The ITS release is usually contained as a comment in all HTML pages generated by the ITS.
		To display this, choose *View → Source* or the right mouse button and *View Source* in the Web browser for any page generated by the ITS (such as the logon page of the SAP GUI for HTML).
	5	**Call the Admin Tool (optional)**
	5.1	**Call the following URL in your local Web Browser (in the training room):**
		`http://<Server with path>:<Admin ITS Port>/scripts/wgate/admin/!`
		For example:
		`http://twdf5000.wdf.sap-ag.de:1085/ scripts/wgate/admin/!`
		Note: Do not forget the "!" character at the end of the URL.
		See exercise text.
		The ITS port may not be accessible from your training room. If this is the case, use the Web browser available on your server.
	5.2	**Log on with the ITS administration user `itsadmin` and password `init`.**
		See exercise text.
	5.3	**Check the status of your ITS instance (the one with the same name as your SAP system). Restart this instance.**
		You can obtain an overview of all ITS instances on your server by choosing the *Overview* function in the left navigation window.
		To restart your ITS instance, open the associated menu and choose *Control*. In the right window, you can now stop or start the WGate (entry W3SVC/3) and the AGate (entry *ITS Manager…*) independently of each other.

Access to Help

3. Starting and stopping the system

4. Introduction to system configuration

5. Technology components for Internet connection

6. Access to Help

7. Basics of database administration

8. System landscapes and transport requests

9. Support Packages and Industry Solutions

10. Scheduling background tasks

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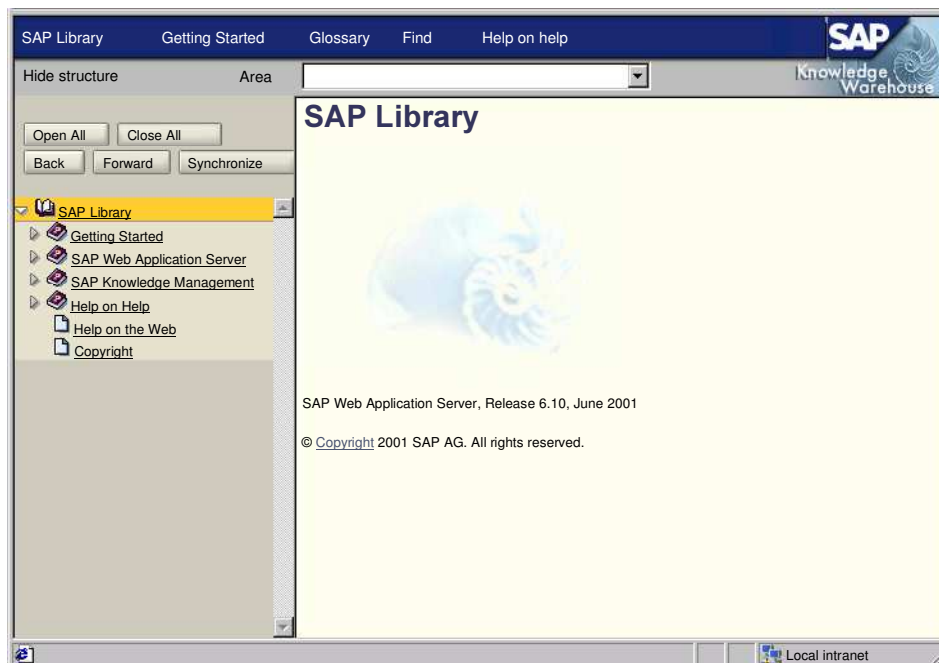
Access to help

SAP

Contents:

- **Configuration of access to online documentation**
- **Information on the SAP Service Marketplace**

Objectives:

At the conclusion of this unit, you will be able to:

- **Set up access to the online documentation**
- **Use the information provided by the SAP Service Marketplace**

Documentation Access with the SAP Library

SAP

| SAP Library | Getting Started | Glossary | Find | Help on help | **SAP** Knowledge Warehouse |

Hide structure   Area   [▼]

[Open All] [Close All]
[Back] [Forward] [Synchronize]

▽ 📖 SAP Library
  ▷ 🔶 Getting Started
  ▷ 🔶 SAP Web Application Server
  ▷ 🔶 SAP Knowledge Management
  ▷ 🔶 Help on Help
       📄 Help on the Web
       📄 Copyright

SAP Library

SAP Web Application Server, Release 6.10, June 2001

© Copyright 2001 SAP AG. All rights reserved.
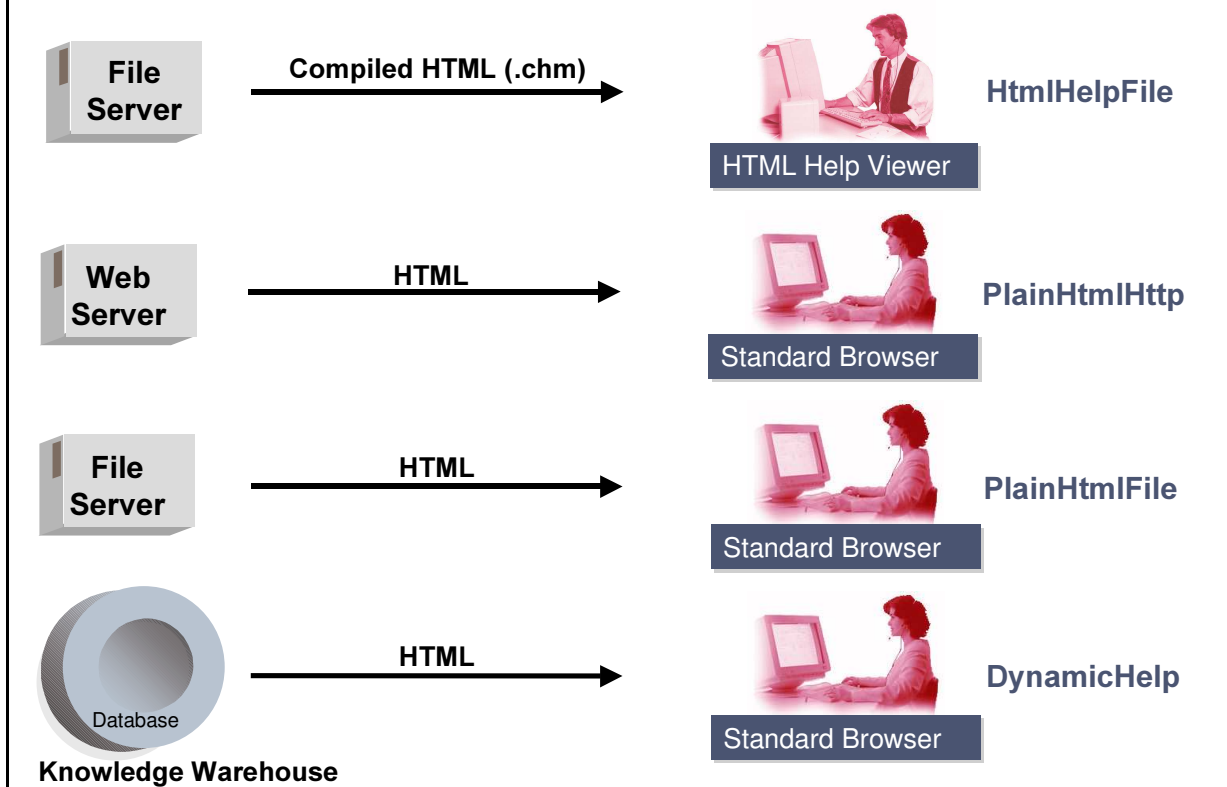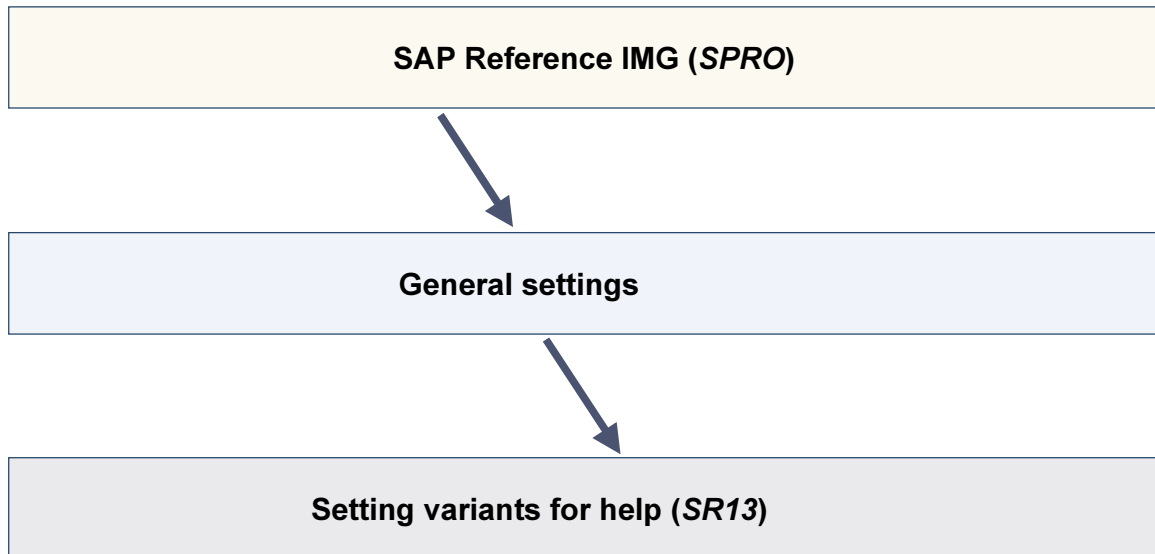
🖳 Local intranet

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- By choosing SAP Library in the *Help* menu, you can display the online documentation. The terms SAP Library and online documentation are often used synonymously. The SAP Library of an SAP system always contains the complete online documentation for the system. For example, the SAP Library for an SAP Web Application Server provides access to more than 33,700 documents and the online documentation for the complete SAP R/3 System 4.6C release contains more than 112,000 documents.

- Using the SAP Library, you can easily search the online documentation, access a glossary, and call an introduction to using SAP systems (Getting Started).

- The online documentation is provided in various languages and, if the calling of help has been correctly configured (as explained in the following pages), is called up in the user's logon language.

The Supported Help Types

SAP

File Server	Compiled HTML (.chm) →	**HtmlHelpFile**
		HTML Help Viewer
Web Server	HTML →	**PlainHtmlHttp**
		Standard Browser
File Server	HTML →	**PlainHtmlFile**
		Standard Browser
Database	HTML →	**DynamicHelp**
Knowledge Warehouse		Standard Browser

- **HtmlHelpFile:** With this help type, the documents are stored in *Compiled HTML* format (*.CHM). The files are made available using a file server and are displayed with the HTML Help Viewer. Compiled HTML is a format developed by Microsoft for storing HTML files in compressed format. The storage space requirement for CHM files is around a tenth of the requirement for uncompressed HTML files and is comparable to the requirement for WinHelp files. Microsoft introduced the HTML Help Viewer as a successor to WinHelp. It is based on Microsoft Internet Explorer. This type of help can only be used on Microsoft Windows 32 bit frontend platforms. This type of help provides a full text search for all documents (global search), or in the documents of the current help file (local search), and allows you to print multiple documents concurrently.

- **PlainHtmlHttp:** With this help type, the documents are stored in the standard HTML format. The documents are made available using a Web server and are displayed with a standard Web Browser. This help type can be used on all frontend platforms and the documentation is displayed using a standard Web browser (Microsoft Internet Explorer or Netscape). This help provides a full text search in all documents (global search) and allows you to print individual help documents.

- **PlainHtmlFile:** This (most simple) help type also stores the documents in standard HTML format. The documents are made available using a file server and are displayed with a standard Web browser. This help variant can be used on all frontend platforms except Microsoft Windows 3.1x (16 bit), and allows you to print individual help documents.

- **DynamicHelp:** DynamicHelp can be used on all frontend platforms, uses the standard HTML format for its files, and the file access takes place using the Knowledge Warehouse server. The documents are displayed in a standard Web browser. For more information, see the online documentation for the Knowledge Warehouse.

Setting Up the Documentation in the SAP System

SAP

SAP Reference IMG (*SPRO*)

General settings

Setting variants for help (*SR13*)

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- With the IMG activity *General Settings → Setting variants for help (SAP Library),* you define which **variant**(s) of the online help are available to the users of the SAP system.

- Caution: Without a corresponding configuration in transaction *SR13*, it is not possible to successfully call help. This is true even if there is a correctly maintained local SAPDOCCD.INI file. In this case, the system displays the message *No documentation available*.

- As of SAP R/3 System 4.6C, you **no longer need to maintain profile parameters** for the online help. During an upgrade from SAP Basis 4.x to SAP Web Application Server 6.10, the values stored in the profile parameters `eu/iwb/...` for help type, storage location, and language version of the help files are read and copied as a settings variant by an XPRA program. These automatically create settings variants (`GENERATED_BY_XPRA...`) that cannot be changed. You must create new settings variants that copy the specifications for the storage location of the help files from the automatically created entries, as long as they are still valid, and then delete the automatically generated settings variants. Use descriptive names when creating new settings variants.

Transaction *SR13*: Example

After selecting the *HtmlHelpFile* tab page, you can make the following entries, for example:

|	
Variant	**<Documentation> or a different descriptive text**
Platform	**<WN32>, This setting is also appropriate for the NT frontend, for example (See SAP Note 333584)**
Area	**<Documentation> (is automatically replaced by *iwbhelp*)**
Path	**<\\twdf5000\Doku\610\> (without language selection)**
Language	**<E> English, selected using the F4 help (is automatically replaced with <EN>)**
Default:	**<X>, in this example, this selection indicates that the help type *HtmlHelpFile* is the default help in the area *documentation* for the WN32 frontend**

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- The above example specifies that on Windows NT-based frontends, the help variant *documentation* determines the help that is usually called with its settings. In this case, this means that the online documentation is called from a network drive **\\twdf5000\Doku\610\EN.** Note that the language ID was automatically added to the path. For frontends of other types (for example, non-Windows based), another help type can be called by default. For these other frontends, you must also set a separate settings variant as the default.

- By maintaining and providing multiple settings variants, you can make the online help available in various ways. A settings variant specifies a configuration of **help type, storage location** of the help files (server and/or path), and the **language version** of the help files **for a particular frontend platform**. If you provide multiple settings variants for a frontend platform, the users can choose between these variants using the menu *Help → Settings* (tab page *Extended Help*).

- In every settings variant you must specify the *Area* for which it applies, in addition to the frontend platform. The area indicates the application area of the SAP Knowledge Warehouse from which the contents to be displayed are taken. The area **IWBHELP** (documentation) contains the online documentation delivered to all customers. Customers that use the SAP Knowledge Warehouse can also define settings variants for the area IWBTRAIN (training).

The Meaning of the sapdoccd.ini File

SAP

Local override of the system-wide help settings at the frontend

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Possible storage locations for the sapdoccd.ini file at the frontend and their evaluation sequence:

1. **Windows directory**

2. **Local or central SAP GUI directory**

3. **\Sapgui - superordinate directory**

For example:

Program Files

3. **SAPpc**

Winnt

1.

SAP GUI

2.
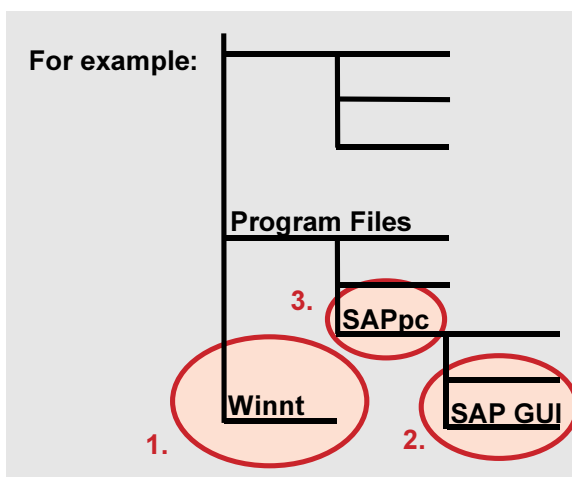
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- A default setting for the selection of online documentation must be made in the system for every utilized frontend platform. If multiple help types are installed, the end user can choose between these variants using the menu *Help → Settings* (tab page *Extended Help*).

- If it is necessary to set up special settings for the online documentation on certain frontends, the call of the online documentation can be controlled on Microsoft Windows frontends with entries in the file *sapdoccd.ini*. A possible reason for this is, for example, as WAN connection between the frontend and the storage location defined in the system for the online documentation. To avoid increased network load in this case, access documentation that is available over a local network from the frontend. This locally available online documentation can be accessed using the information in the *sapdoccd.ini* file. If this file exists with valid settings, these override the system settings for the relevant frontend. Possible entries in the *sapdoccd.ini* file are shown in the next graphic.

- Note: The file *sapdoccd.ini* is only evaluated if settings for access to the online documentation exist in the system (transaction *SR13*). Otherwise, the system displays the message *No documentation available*.

Contents of sapdoccd.ini

SAP

The contents of sapdoccd.ini

```
[HTMLHELP]
```
   HelpType=PlainHtmlHttp
   PlainHtmlHttpServer=p99999.sap-ag.de:1080
   PlainHtmlHttpPath-DE=saphelp/helpdata/DE
   PlainHtmlHttpPath=saphelp/helpdata/EN

apply for all systems, all releases, unless

```
[HTMLHELP-<Release>]
```
   HelpType=HtmlHelpFile
   HtmlHelpFilePath-DE=\\DOKU\610\htmlhelp\helpdata\DE
   HtmlHelpFilePath-EN=\\ DOKU\610 \htmlhelp\helpdata\EN
   HtmlHelpFilePath=\\ DOKU\610 \htmlhelp\helpdata\EN

an individual release

```
[SystemId-<R/3-System>]
```
   HelpType=HtmlHelpFile
   HtmlHelpFilePath-DE=\\p12345\htmlhelp\helpdata\DE
   HtmlHelpFilePath=\\p12345\htmlhelp\helpdata\EN

or a selected system is explicitly assigned a different help type.

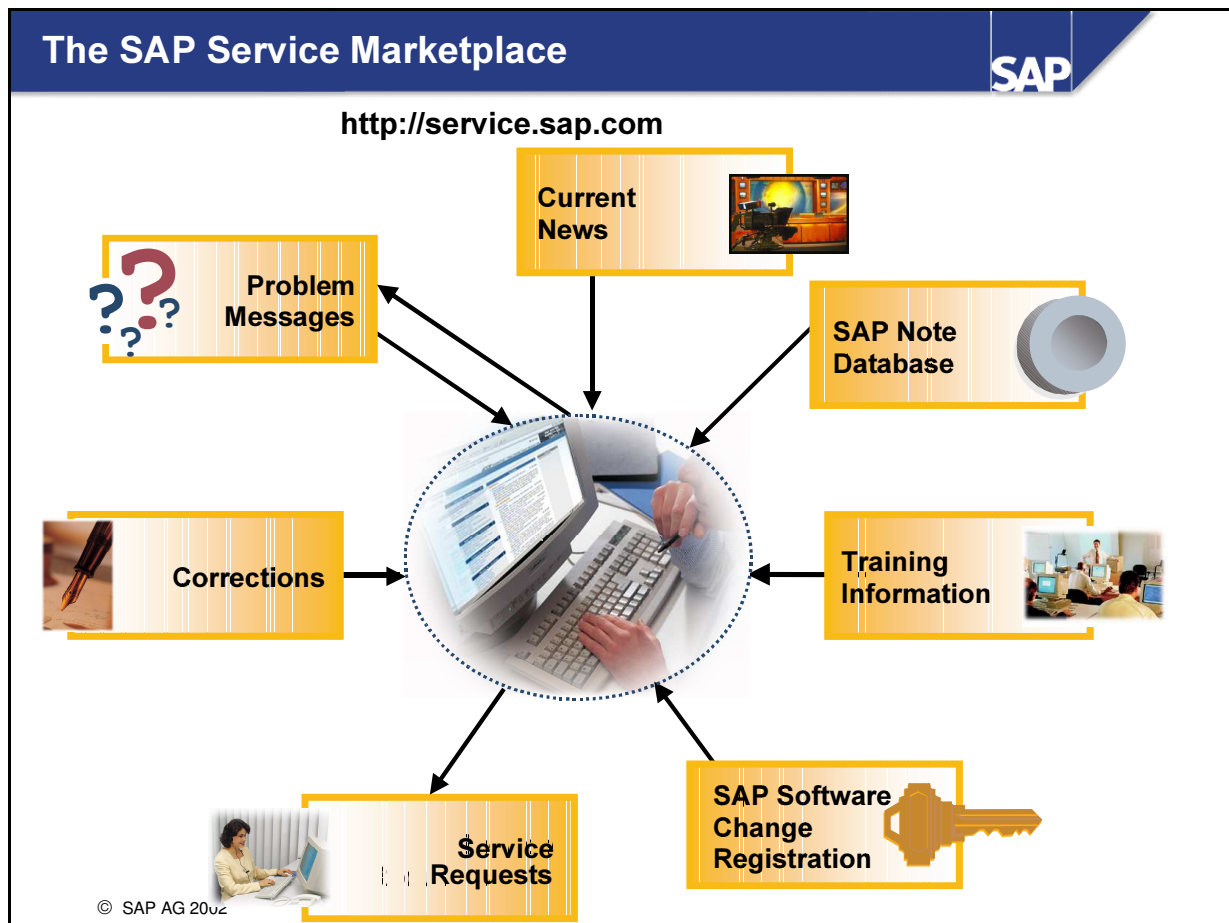**For example: <Release> = 610, <R/3-System> = DEV**

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Explanation of the parameters and possible values:

- **HelpType**: PlainHtmlHttp, PlainHtmlFile, HtmlHelpFile, DynamicHelp, GetFromR3

- **<HelpType>Server**: Name of the Web server on which the files for <HelpType> are stored

- **<HelpType>Path-<Language>**: Path under which the help for the logon language <Language> is stored: <Language> should be replaced with a two-character language ID.

- **<HelpType>Path**: Path under which the help that is to be displayed if the parameter <HelpType>Path-<Language> is not defined for the current logon language is stored.

  - The help type *GetFromR3* does not represent a separate help type. It is used to obtain the current valid settings variant of the SAP system. If *GetFromR3* is specified as the help type (HelpType=GetFromR3), the settings are taken from the SAP system. If the server and/or path to the corresponding help type are also specified in the file *sapdoccd.ini,* these settings override the settings from the SAP system.

The SAP Help Portal

http://help.sap.com

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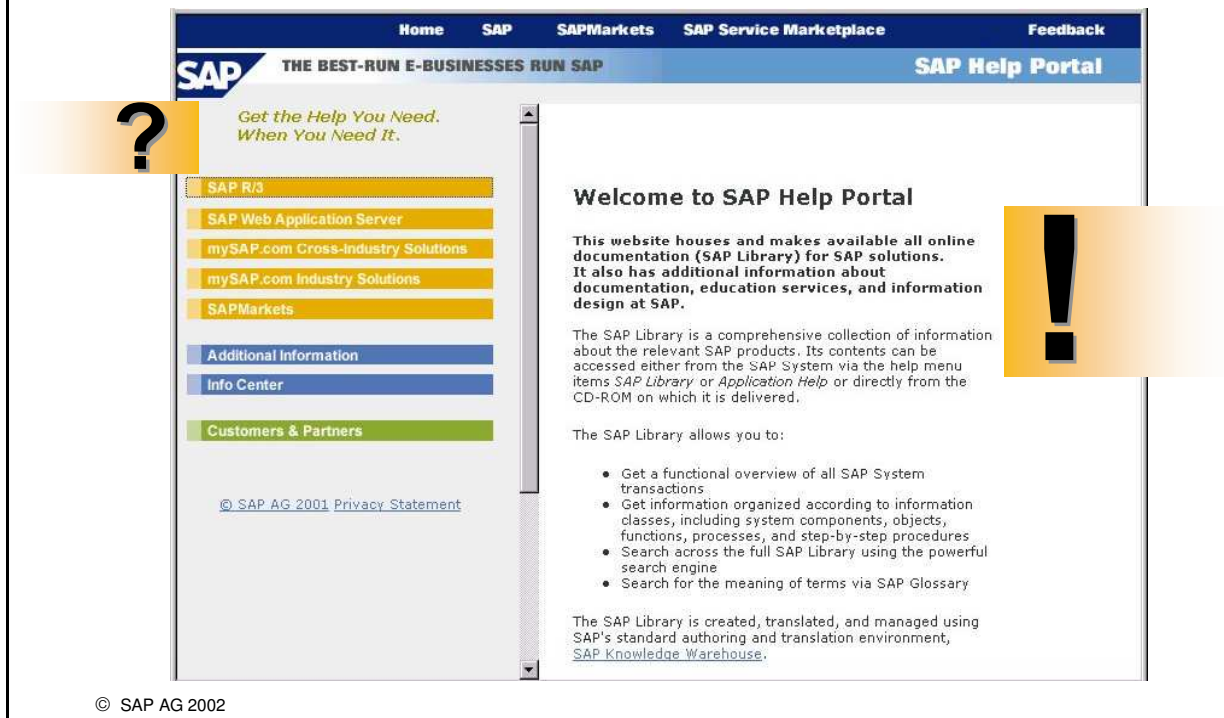
- The SAP Help Portal provides Internet-based access to the available online documentation for SAP software solutions. The Help Portal can be accessed from every Web-capable frontend without logon. The documentation provided can be accessed very efficiently using a full text search.

The SAP Service Marketplace

http://service.sap.com

Current News

Problem Messages

SAP Note Database

Corrections

Training Information

Service Requests

SAP Software Change Registration

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- The Web site http://www.sap.com provides information about all SAP Solutions and about SAP as a company. This information is public and can be accessed by anyone. In addition to this, SAP provides various services, detailed information, and so on for customers and partners on the SAP Service Marketplace at http://service.sap.com. Access to the SAP Service Marketplace (SMP) is free of charge, however it is protected by a user name and password logon. There is at least one person with access to the SMP at every customer. This person can create additional users and assign certain authorizations to those users.

- There are two simple options available to simplify navigation:

  • Personalization of the initial screen

  • Navigation using Quick Links, such as http://service.sap.com/smp
    Quick Links are simply added to end of the base address with a slash (/) (in this case, *smp*).

- Important Quick Links:

  • /user-admin   User administration on the SMP (for your users).

  • /sscr   You can obtain SAP Software Change Registration keys here.

  • /notes   Online access to the SAP Notes is available under this Quick Link.

  • /swcenter   Patches, Updates, and other software for your SAP systems is available here.

  • /message This Quick Link allows you to create a message to SAP.

  • /servicecat   The service catalog displays a list of the services provided by SAP.

  • /instguides   Installation Guides for the various SAP Solutions are available here.

  • /technology   This QuickLink leads to the latest information about mySAP Technology.

  • /education   Information about SAP's worldwide training provision is available in an online catalog.