## **Learn SAP Basis in 1 Day**

By Krishna Rungta

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## **Table Of Content**

**Chapter 1: What is SAP BASIS? Complete Tutorial** 

Chapter 2: How to Download & Install SAP GUI (FrontEnd) for Windows

**Chapter 3: What is SAP Instance & SAP SID?** 

**Chapter 4: Sap R/3 Architecture Tutorial** 

**Chapter 5: What is Client? How to Create a New Client in SAP SCC4** 

**Chapter 6: SAP Client Copy: Local, Remote, Import/Export** 

**Chapter 7: How to Delete a Client in SAP SM50** 

**Chapter 8: SU01: How to Create a New User in SAP** 

Chapter 9: How to Lock (SU01) & Unlock (SU10) a SAP User

<u>Chapter 10: SAP RZ11: Parameter (login/fails to session end) Limit Logon</u>
<u>Attempts</u>

**Chapter 11: SAP USR40: How to set Password Restrictions** 

<u>Chapter 12: SAP Background Job Processing SM36: Create, Schedule, Reschedule</u>

Chapter 13: SAP SM37: How to Monitor a Background Job
Chapter 14: SAP RSBTCDEL2: How to Delete a Background Job
Chapter 15: SAP TMS (Transport Management System) Tutorial
Chapter 16: How to Configure STMS (SAP Transport Management System)
Chapter 17: SAP Routes & Layers: Step by Step Configuration
Chapter 18: What is SAP Transport Request? How to Import/Export TR
Chapter 19: Support Package & Stack Upgrade: SAP SPS
Chapter 20: Download & Upgrade SAP Kernel: Step by Step Tutorial
Chapter 21: SAP Monitoring & Performance Checks: Complete Tutorial with Tcodes
Chapter 22: What is OSS Notes? SAP SNOTE Tutorial
Chapter 23: Remote Function Call (RFC) in SAP Tutorial
Chapter 24: How to Configure & Test RFC Connection in SAP  - SM59
Chapter 25: SAP IDOC Tutorial: Definition, Structure, Types, Format & Tables

**Chapter 26: What is SAP LSMW? Steps to Migrate Data using LSMW** 

## **Chapter 1: What is SAP BASIS?**

#### What is BASIS?

Basis is a set of programs and tools that act as an interface with Database, Operating system, Communication protocols and business applications (such as FI, CO, MM,etc). Full form of BASIS is "Business Application Software Integrated solution"

SAP applications such as FI,CO,PP etc. can run and communicate with each other across different Operating systems and Databases with the help of BASIS.

Nowadays Basis is known as **Netweaver.** 

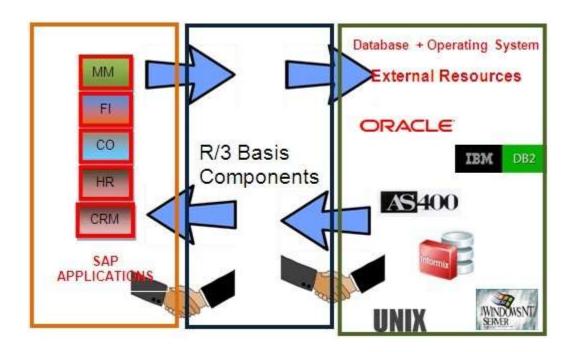
Alias of BASIS is SAP Application Server Technology and alias of NetWeaver is SAP Web Application Server.

After adding java stack (the applications which are developed in J2EE,BSP,JSP,etc..) enhanced security standard for business process. Both ABAP and Java stack can be monitored from one platform. Netweaver supports standard protocols such as HTTP,SMTP,XML,SOAP,SSO,WEBDAV,WSDL,WMLSSO,SSL,X.509 and Unicode format(representation of handling text).

We can say **Basis is the operating system for SAP applications and ABAP.**Basis provides services like communication with the

operating system, database communication, memory management, runtime collection of application data, web requests, exchanging business data etc...

Basis supports a number of known operating systems (Unix flavors, Microsoft windows server edition, AS400, z/OS, etc.) and databases (Oracle, DB2, Informix, Maxdb, Microsoft SQL Server, etc.)..



As we know BASIS is a set of tools. This tool has the following different functionalities:-

- System monitoring and administration tools
- Common monitoring tool CCMS(Computing Centre Management
   System) to monitor alerts of R/3 system from one place.
- Server side scripting in ABAP and Javascript.

- Use of Business server pages to build online stores and portals.
- Database monitoring and administration utilities
- Resource management like memory, buffer, etc. Authorization
- and profile management tools for user management.
- Internet access control to the system and business objects. Transfer
- modifications in a screen, program, layout from the development to a production system for accuracy purpose by Transport Management System.
- Client-server architecture and configuration.
- Graphical User Interface designing for the presentation layer.

## SAP Basis consultant's responsibilities:-

SAP Basis is a middleware tool for applications, operating system, and database. SAP Basis consultant should able to do the following tasks:-

- SAP application server monitoring, ABAP dump, and system log analysis.
- Performance tuning
- Database maintenance, Database backup schedule and restore R/3,
- NetWeaver, solution manager installation, etc..
- SAP license maintenance.
- SAP landscape, transport management system installations, etc Client
- creating, client copying, client deletion, etc
- Creating user, assigning roles, locking and unlocking users,etc
- Background jobs scheduling, job monitoring, job deletion, etc
- Profile and operation mode maintenance
- Applying support patches, upgrading and installing add-ons
- SNOTE applying and removing errors.
- System copy, System refresh ,etc

This a generic list. There are many other responsibilities that a Basis consultant shoulders. Every day you learn something new!

# Chapter 2: How to Download & Install SAP GUI (FrontEnd) for Windows

Before you can configure and use the SAP GUI, you need to download the software from the SAP Marketplace as per steps below -

Step 1) Goto service.sap.com to Download SAP GUI 7.40 for Windows



**Step 2)** Enter S-user and password as provided by SAP.



### Step 3) Goto "Software Downloads."



## Step 4) Choose "Browse our Download Catalog."



#### Step 5) Choose SAP Frontend components

like SAP Sales OD Integration SAP Rapid Deployment solutions

Operation rapid-deployment solution, ...

#### **Analytics Solutions** like Address Directories & Reference Data, Crystal Reports Viewer, SBOP Data Federator, SBOP Enterprise, SBOP Extended Analytics, SBOP Text Analysis, ... like SAP Business One 8.8, SAP Business One 2007, Crystal Reports for B1, Remote Support Platform for B1, ... **SAP Connectors** like Business Connector, ... SAP Content like BI CONT, SAP Business ByDesign CONTENT, ... SAP Cryptographic Software like SAP Cryptographic Library, ... like customer-specific development projects software, ... SAP Education Products like Acrobat Con Learning by Adobe, Knowledge Acceleration, RWD Info Pak Sute SAP Frontend Components like NetWeaver Business Client, SAP GUI for Windows, SAP GUI for JAVA, SAP ITS, SAI SAP In-Memory (SAP HANA) like SAP HANA Enterprise Edition, SAP HANA Enterprise Ext. Edit., SAP HANA Platform Edition SAP Mobile Solutions Mie MOB ACCAPROVER INT, MOB HR APPROVAL INT, MOB MGR INSIGHT IPD, ... SAP NetWeaver and complementary products like SAP NetWeaver, SAP NetWeaver CE, SAP NetWeaver Mobile, SAP NW Identity Management, SAP MDM, SAP Content Server, ... SAP On-Demand Solutions

like SAP Business Communication Management rapid-deployment solution, SAP CRM rapid-deployment solution for Sales, Marketing, and Service, SAP IT Service Desk

**Step 6)** Choose SAP GUI for your OS. In this demo, we will select Windows-



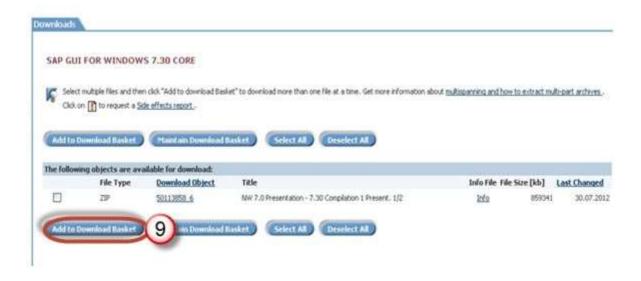
Step 7) Choose SAP GUI 7.30 Core which is the latest one.



**Step 8)** Choose installation



**Step 9)** Choose Add to download Basket



Step 10) Choose the Download Basket



Step 11) Choose Your download and it will begin.



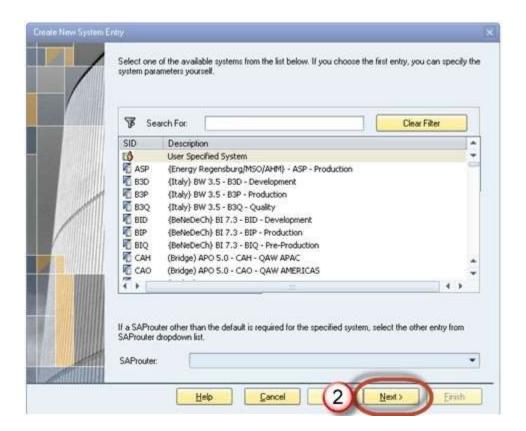
## Time to configure your GUI

Once the download is complete and you have installed the software, it's time to configure it -

**Step 1)** Click on create the button as shown below.

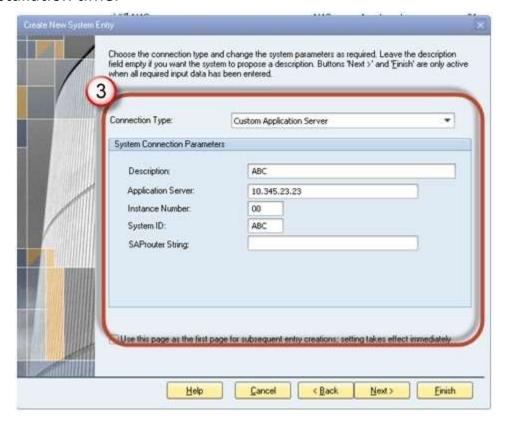


## Step 2) Click next button



## Step 3) Fill the Server details

- 1. **Connection Type**: Custom Application Server(Particular one host)
- 2. **Description**: Name of instance
- 3. Application Server: IP address of remote application server
- 4. **Instance number** which you can find from os level (Unix) Goto /usr/sap/sid/DVEBGMS00 Here instance number = 00
- 5. **System ID**: As per you setting which you have specified during installation time.



**Step 4)** Created system will be there in the list as per shown below.



Double Click on the instance to log-in to a SAP Server.

## Chapter 3: What is SAP Instance & SAP SID?

## What is an Instance?

Sap Instance is a group of resources such as

- Memory
- Work Processes
- Dispatcher
- Gateway

usually for a single application or database server within a SAP R/3 client-server environment.

There are three types of instances:-

- 1. Dialog instance
- 2. Central Instance
- 3. Database Instance

```
SAP System= Dialog Instance + Central Instance + Database Instance.
```

For one SAP system, all three instances share the same directory.

Dialog Instance: - Dialog instance exists in the application layer. Its
purpose is to maintain the load on the server. Dialog instance exists on
the different host. If a number of dialog instance increases hardware
resources, dispatcher, workprocesses

also increases so that more number of users can login at a time.

- Central Instance: Central instance can also work as dialog instance.
   But the main thing is that it contains Enqueue and message servers. All dialog instances communicate with central instance before requesting database with message server. When an instance is started, the dispatcher process attempts to establish a connection to the message server so that it can announce the services it provides (DIA, BTC, SPO, UPD, etc.). Lock table is managed in central instance by enqueue service.
- **Database Instance**: As normal database instance accepts requests from central instance to fulfill the user's requests. As lock management system provided by enqueue server, it will provide service to users.

## What is SID?

SID is a unique identification code for every R/3 installation (SAP system) consisting of a database server & several application servers. SID stands for SAP System Identification. SAPSID — a three-character code such as C11, PRD, E56, etc.)

## **Logical System Names: -**

When data is distributed between different systems, each system within a network has to be clearly identifiable. The "logical system" deals with this issue.

A logical system is an application system in which the applications work together on a common database. In SAP terms, the logical

system is a client.

Since the logical system name is used to identify a system uniquely within the network, two systems cannot have the same name if they are connected to each other as BW systems or as source systems, or if there are plans to connect them in any way.

### Example for production system logical system name might be:-

SID – PBG

SID Description - P=Production(type) , B=BW(component) , G=Germany.(plant name)

## **Logical System name-**

PBGCLNT100. This form is easy to understand.

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