



BSNL ERP

Project
BSNL 
ERP
Towards a paperless world



Training Coverage

**Project
Overview**

**Navigating
SAP**



What is ERP?





What is ERP?

E	Enterprise	BSNL	
R	Resource	1	Money
		2	Men
		3	Material
		4	Machines
P	Planning	Optimum utilisation	



ERP - Definition

Enterprise Resource Planning:

“Software solution that addresses the Enterprise needs, taking a process view of the overall organization to meet the goals, by tightly integrating all functions under a common software platform”



Why ERP?

- For Management – To know what is happening in the company.
- One solution for better Management.
- To achieve cost control & low working capital
- To avoid the geographical gaps.
- To satisfy the customers with high expectations.
- To be Competitive.



Key Benefits of ERP

- Real time data is available from a centralized data base.
- Integration of Business Processes.
- Seamless flow of information.
- Standardization of processes across all Locations.
- Improved Operational Efficiency.
- Faster Consolidation at Head office for statutory reporting.



Implementation in BSNL

- PO placed on M/s HCL Infosystems.
- BPR (Business Process Re-Engineering) by M/s Ernst & Young and M/s HCL.
- ERP Software by M/s SAP India.
- Main Data Centre at Hyderabad & Disaster Recovery at Kolkata.
- BSNL has purchased 40 thousand Licenses



Phases of Implementation

- **POC (Proof of Concept)** Taken one unit each from various business units and implementation completed- Telecom Factory Mumbai, WTP, ALTTC, STR, Karnataka Telecom Circle, BSNL CO, Maharashtra Telecom Circle & ITPC, Pune.
- **ROP - Roll-Out Phase (Pan India)** Phase-I NATFM Hyderabad, BBNW, WTR, Telecom Stores Kolkata, Andhra Pradesh Telecom Circle, Gujarat Telecom Circle & Punjab Telecom Circle.



Process of Implementation

- **As is** Study of the existing system.
- **BPR** BPR [Business Process Re-engineering] is a process which explores the possibility of doing things in different ways to Improve efficiency in the operation and it involves Re-thinking, re-designing
BPR brings out the deficiencies of the existing setup. Compare enterprise best practices and adopted.
- **BBP** BBP [Business Blue Print] is the activity where the existing processes and the new adopted processes are documented.
- **Realization** The BBP (design) is implemented in the ERP system.
- **Cut over** Declare Black out period [Stop business Transactions] to migrate the Legacy data .
- **Go-Live** The new system is adopted.



Major BSNL decisions for

ERP

- **Creation of CSC :** BSNL Management has decided for centralization of the payment & settlement function of the company at Corporate office and Circle office level which is a part of business process change. Drawing & Disbursing units at SSA level is to be discontinued after ERP Roll out phase.
- **Consolidation of Bank Accounts:** BSNL Management has decided to consolidate banking operation of SSAs/DDOs through a single operation account at circle, up on migration to ERP.
- **Merger of Civil/Electrical Units & CMTS Wing:** Accounting of Civil/Electrical Units & CMTS Wing is to be merged with respective SSAs.



About SAP and its Modules

Technical Modules

- ABAP

- BASIS **Functional Modules**

Finance

Logistics (MM/PM/PS/S&D/REM)

HR

Cross-Applications

- SCM (Supply Chain Management)
- CRM (Customer Relationship Management)
- SRM (Supplier Relationship Management)



ERP Modules in BSNL

S. No.	MODULE NAME	S. No.	MODULE NAME
1	FICO a. Finance b. Control	4	PM Plant Maintenance
2	HCM Human Capital Management	5	PS Project Systems
3	a. MM Material Management b. SRM Supplier Relationship Management	6	REM Real Estate Management
		7	SD Sales & Distribution
8	BASIS Networking, Roles & Authorisation	9	ABAP Advanced Business Application Programming



Functionality of SAP Modules

FICO Module

FI - Financial Accounting is used for external reporting i.e. Balance sheet, Profit and Loss statements. General Ledger accounting Accounts Receivables, Accounts Payable, Asset Accounting, Bank Accounting, Consolidation, Special Purpose Ledger and Travel Management, Processing & Settlement of Temporary Advance.

CO - Controlling Module is used for the internal reporting purpose. Controlling Area is the organization unit used to represents the controlling activities of Cost Center accounting, Profit Center Accounting, Product Costing, and Profitability etc.



Functionality of SAP Modules

HCM Module i/c Pay Rolls

Organisational Structure, Personal Actions e.g. Training, Promotion, Transfer etc. Career History. Run Regular Pay (Salary) / Off cycle Pay (Personal claims).

ESS & MSS Portal (Claim items e.g. Newspaper/ Mobile/ Brief Case etc.) Medical Claims, Travel Management etc. Form 16, GPF Balance Slips / Withdrawl / Advances, Leaves, Annual Property Returns etc.



Functionality of SAP Modules

MM Module

Material / Service Procurement

- Requisition
- A.P.O. & Purchase Order
- Goods Receipt / Service
Verification for Vendor payment.

Inventory Management



Functionality of SAP Modules

SRM Module:

Registration of Suppliers / Vendors
&
E-Tendering
(Under development)



Functionality of SAP Modules

PM Module:

Planned & Unplanned Maintenance of various technical objects of Consumer Mobility, Broad Band, CFA, IT, Transmission (Equipment & Route), Electro-Mechanical, Civil, Ducts, Fleet etc. including their Log books [Condition Monitoring] & History Sheets [Catalog] and Scrapping, Re-parenting (Shifting) etc.

Notification types: Preventive, Breakdown, General, Corrective, **Calibration**, **Shutdown**, **Energy Audit** & Report Fault (G-1) with corresponding order types.



Functionality of SAP Modules

PS Module:

Execution & Monitoring of Capital Project works of various business lines e.g. CM, BB, CFA, General (Civil & Electrical) including Project Creation, its approval and Budget Allotment.

External Projects Execution & Monitoring.

Elements are Project, WBS (Work breakdown structure), Network, Activity, Cost Settlement and AUC (Asset under construction).



Functionality of SAP Modules

REM Module:

- Lease-in & Lease-out of Land and Buildings.
- Lease-in & Lease-out of CMTS Towers & USO Towers (Part-A and Part-B) – Under Development.
- Staff Quarter Allotment to Employees & Others.
Temporary Allotment of Staff Quarters.
- Booking/Allotment of Inspection Quarter, Holiday Home, Hostel, Community Centre, Auditorium etc.
- Management of Contracts.
- Purchase of Land and Buildings.



Functionality of SAP Modules

SD Module: The processes covered are

- First point of sale
- POI (Point of Interconnect)
- Enterprise Business lead tracking
- Sale of Mobile(CM) & CFA products to CSC and Channel Partners (Franchisee/DSA/RD)

Process Flow

- The Inventory Data in SAP shall be updated in Sanchar-soft through an outbound interface.
- The Retail sale to end customers will be made from Sanchar-soft & sale details will be updated in SAP at end of the day through an Inbound Interface.
- **Sale Cycle-** Sales Order, Receipt of Payment, Delivery & Invoicing.



Functionality of SAP Modules

BASIS Module:

- Support for readiness of Networking.
- Guidelines for readiness of PC for ERP access.
- Roles and Authorization being done centrally
- MANTIS (ERP Helpdesk).



Functionality of SAP Modules

ABAP Module:

- Back end Programming.
- Customised development of Reports.



Development Center

- Project operate under guidance of BSNL CO CIT Cell.
- Development Centre established at ALTTC Ghaziabad.
- BSNL officers along with System Integrator M/s HCL representatives are working in the **CORE TEAM** for various modules.



Regional Core Teams

- Roll out phase to be operated under ITPC, Pune
- Four Regional Teams formed at:

North Zone - Chandigarh

South Zone - Hyderabad

East Zone - Kolkata

West Zone - Ahmedabad



SAP Navigation

Let's Login into SAP



Double
click



Login Screen

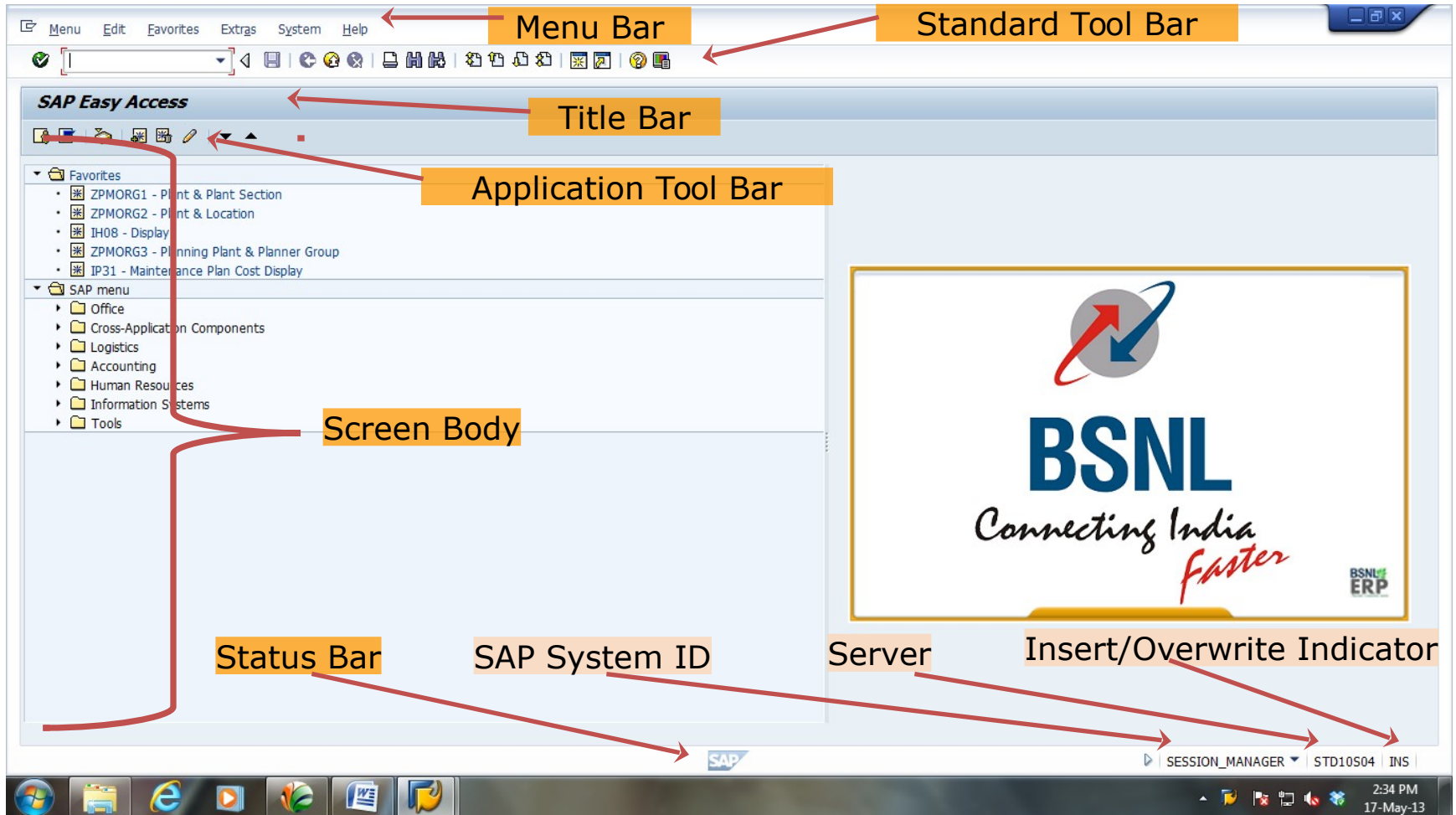
The screenshot shows the SAP Login screen with the following fields and callouts:

- Client:** A text box containing the value '400'. A callout points to this field with the text: "We shall work in QAS client server 400 for training. Actual production server 500".
- User:** A text box with a yellow highlight. A callout points to this field with the text: "Enter user TRG user id in 400. In PRD user id shall be our HRMS no. [Last 8 numerals leaving the first numeral (1 or 2)]".
- Password:** A text box filled with asterisks. A callout points to this field with the text: "Enter pass word provided for training. The default password in PRD shall be given, which need to be changed at the first login. New password to be minimum 8 ALFAA Numeric characters including one special character".
- Language:** A dropdown menu with a small square icon next to it.

The SAP logo is visible in the top left corner of the application window. The Windows taskbar at the bottom shows several open applications: "ERP Overview & Navigati...", "BSNL_ERP_OVERVIEW &...", "SAP Logon 730", and "SAP". The system clock in the bottom right corner shows the time as 4:27 PM.

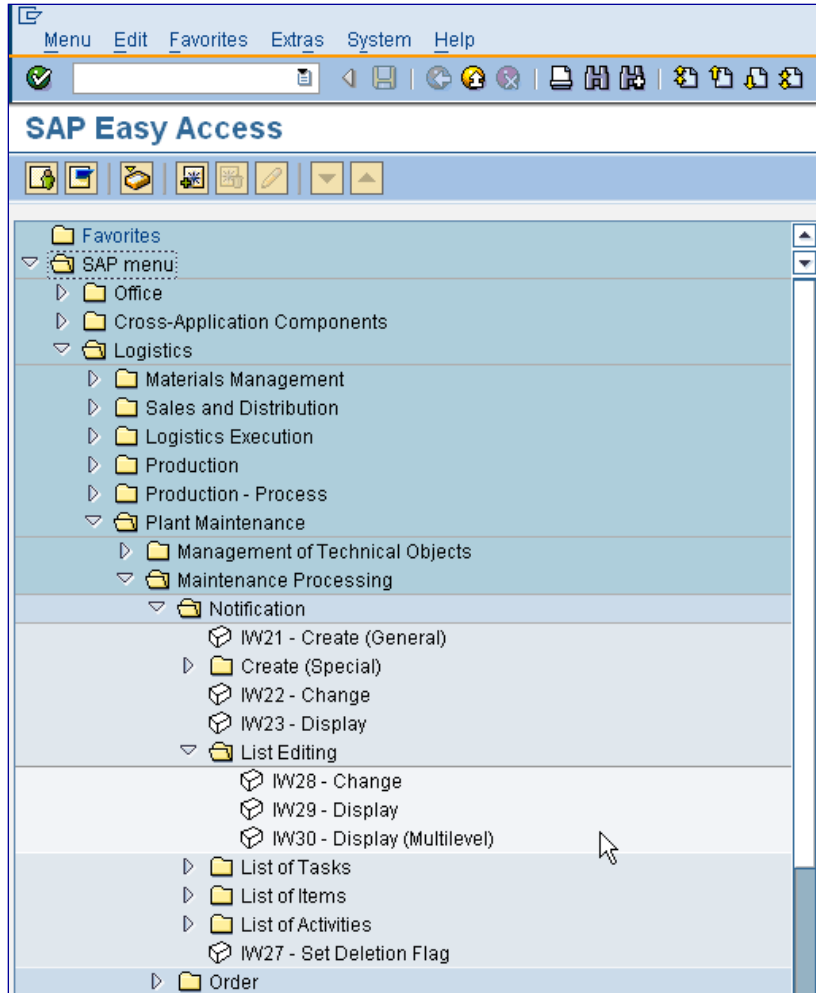


SAP Window





Using Navigation Area



You can expand and collapse menus in the navigation area by choosing the dropdown arrows to the left of the menu items, as in the example below.

To open an application in the navigation area

Double-click on the node



Using Navigation Area

SAP Easy Access - User Menu For Sunil Gupta

Switch to SAP menu

User Menu is displayed

BSNL
Connecting India Faster

SAP



Using Navigation Area

The screenshot shows the SAP Easy Access interface. On the left is the navigation area with a tree structure. A blue callout box with the text "Click to open Nodes." points to the "SAP Menu" folder. The tree structure is as follows:

- Favorites
 - SAP Menu
 - ▶ Office
 - ▶ Cross-Application Components
 - ▶ Logistics
 - ▶ Materials Management
 - ▶ Sales and Distribution
 - ▶ Logistics Execution
 - ▶ Production
 - ▶ Production - Process
 - ▶ Plant Maintenance
 - ▶ Customer Service
 - ▶ Quality Management
 - ▶ Logistics Controlling
 - ▶ Project System
 - ▶ Agency Business
 - ▶ Central Functions
 - ▶ Accounting
 - ▶ Human Resources
 - ▶ Information Systems
 - ▶ Tools

The main content area on the right displays the BSNL logo and the text "Connecting India Faster" in a stylized font. The BSNL logo consists of a red and blue circular arrow icon above the word "BSNL" in blue, with "Connecting India" in black and "Faster" in red script below it. A small BSNL ERP logo is in the bottom right corner of the content area.



Using Navigation Area

SAP Easy Access - User Menu For Sunil Gupta

Menu Edit Favorites Extras System Help

✓ [Search Bar] [Icons]

Navigation Area:

- ▼ Favorites
 - ✳ SAP Appointment Calendar (Employee)
 - ✳ **Maintain Own User Address**
 - ✳ SAP (own) Appointment Calendar
- ▼ User Menu For Sunil Gupta
 - 🔒 T-code for roles assign & De-assign
 - 🔒 User Mass Maintenance
 - 🔒 Output Controller
 - 🔒 User Information System
 - 🔒 User Maintenance
 - 🔒 Maintain Own User Address
 - 🔒 SAPoffice: Short Message
 - 🔒 User Display
 - 🔒 Convert to PDF
 - 🔒 SAP Appointment Calendar (Employee)
 - 🔒 SAP (own) Appointment Calendar
 - 🔒 Short Message
 - 🔒 SAP Business Workplace
 - 🔒 Overview of job selection
 - 🔒 Display Spool Requests
 - 🔒 Analyze User Buffer
 - 🔒 Session Manager Menu Tree Display
 - 🔒 Maintain Users Own Data
 - 🔒 Evaluate Authorization Check
 - 🔒 Temporary Advance- Leading Positions
 - 🔒 Temporary Advance Status Report
 - 🔒 Down Payment Request
 - 🔒 Temporary Advance Request
 - 🔒 Temporary Advance Settlement
 - 🔒 Payroll-transfer-prelimProg, DME-40

Create favorites menu by drag & drop

Node added to favorites list

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BSNL ERP



Business Work Place

SAP Easy Access - User Menu For Sunil Gupta

Click on this Icon

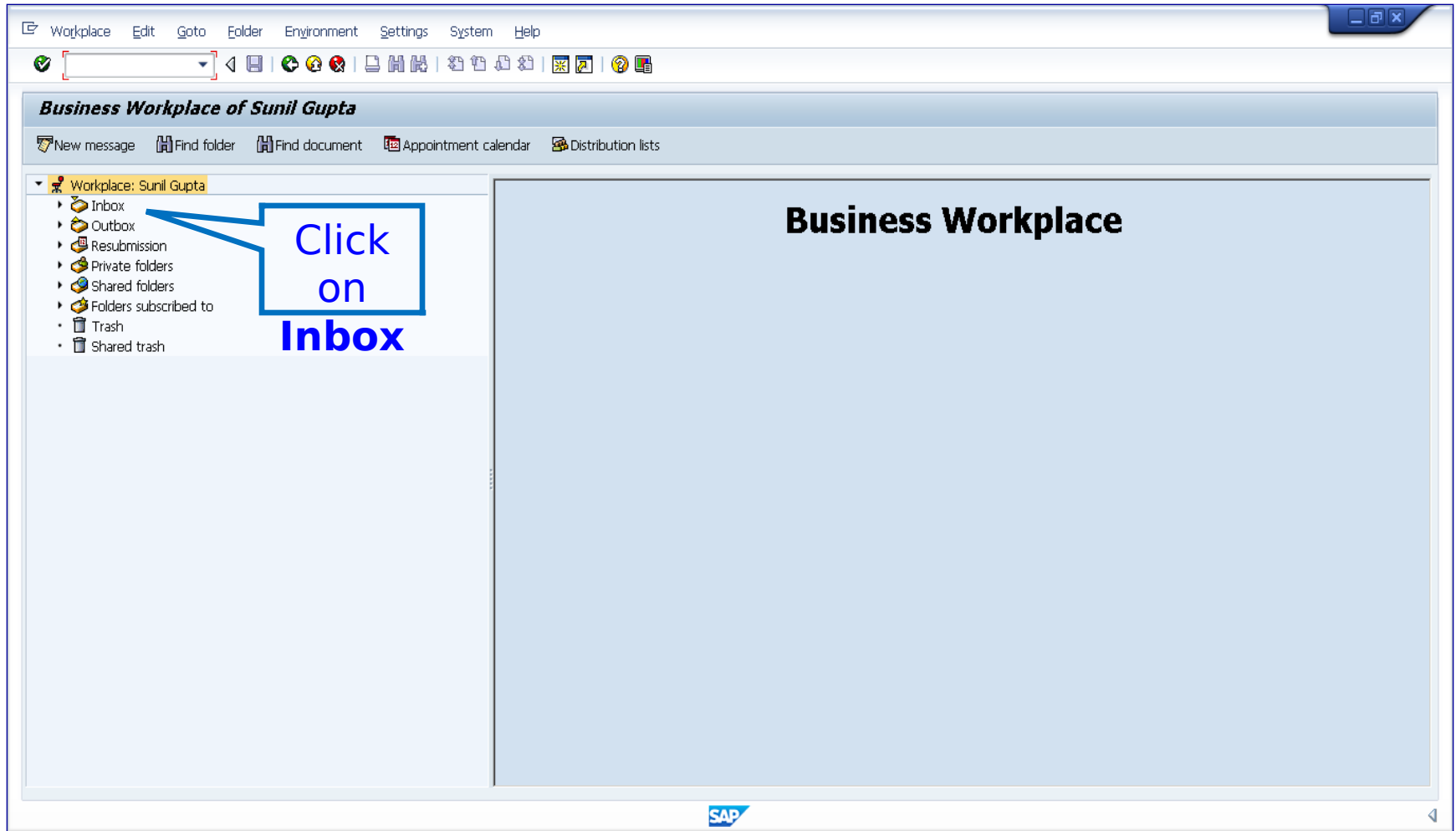
- Favorites
- User Menu For Sunil Gupta
 - T-code for roles assign & De-assign
 - User Mass Maintenance
 - Output Controller
 - User Information System
 - User Maintenance
 - Maintain Own User Address
 - SAPoffice: Short Message
 - User Display
 - Convert to PDF
 - SAP Appointment Calendar (Employee)
 - SAP (own) Appointment Calendar
 - Short Message
 - SAP Business Workplace
 - Overview of job selection
 - Display Spool Requests
 - Analyze User Buffer
 - Session Manager Menu Tree Display
 - Maintain Users Own Data
 - Evaluate Authorization Check
 - Temporary Advance- Leading Positions
 - Temporary Advance Status Report
 - Down Payment Request
 - Temporary Advance Request
 - Temporary Advance Settlement
 - Payroll-transfer-prelimProg. DME-40
 - Edit posting runs
 - Create Posting Run
 - Payroll program - India

BSNL
Connecting India Faster

SAP



Business Work Place





Business Work Place

Workplace Edit Goto Folder Environment Settings System Help

Business Workplace of Sunil Gupta

New message Find folder Find document Appointment calendar Distribution lists

Workplace: Sunil Gupta

- Inbox
 - Unread Documents 0
 - Documents 15
 - Workflow 0
 - Overdue entries 0
 - Deadline Messages 0
 - Incorrect entries 0
- Outbox
- Resubmission
- Private folders
- Shared folders
- Folders subscribed to
- Trash
- Shared trash

Inbox

Class	Title	Date recei...	Author	Atta...	Stat...
Outdoor Claim no.	00000000065649 ...	06.01.2014	A V GEORGE		
Outdoor Claim no.	00000000065644 ...	06.01.2014	A V GEORGE		
Outdoor Claim no.	00000000065634 ...	06.01.2014	A V GEORGE		
IPR Submission		01.01.2014	Sunil Gupta		
SUNIL GUPTA Leave Request		19.12.2013	Mohan Singh Asawat		
SUNIL GUPTA Leave Request		11.12.2013	Mohan Singh Asawat		
Your joining on 22.11.2013 has been		26.11.2013	WF-BATCH		
Outdoor Claim no.	00000000058462 ...	22.11.2013	A V GEORGE		
Outdoor Claim no.	00000000058463 ...	22.11.2013	A V GEORGE		
Outdoor Claim no.	00000000058461 ...	22.11.2013	A V GEORGE		
Outdoor Claim no.	00000000052094 ...	21.11.2013	A V GEORGE		
Outdoor Claim no.	00000000052095 ...	20.11.2013	A V GEORGE		
Outdoor Claim no.	00000000052096 ...	20.11.2013	A V GEORGE		
SUNIL GUPTA Leave Request		31.10.2013	Murali Krishna Bathla		
SUNIL GUPTA Leave Request		31.10.2013	Murali Krishna Bathla		

Outdoor Claim no. 00000000065649 has been Approved

Outdoor Claim no. 00000000065649 has been Approved

Taxable Amount :Rs.1375.00
Non-Taxable Amount :Rs.0.00

Approver's Remarks

**Mails in
Inbox**

**Displayed
Selected
mail in Inbox**

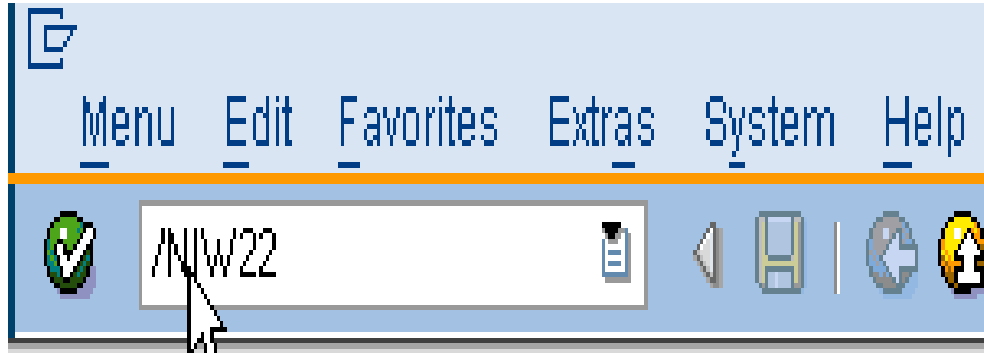
Displayed

SAP



Transaction Codes

A transaction code can be entered in the Command field.



- If the transaction code is preceded with **/n** then the next transaction screen opened in the current session.
- If the transaction code is preceded with **/o** then an additional session is opened for the transaction. This means multiple sessions.



Transaction Codes – contd.

To start a transaction in ECC [ERP Central Component] 6.0, there are 4 options:

- ☐ Position the cursor on the required transaction in the tree structure and press enter.
- ☐ Double-click on the required transaction in the tree structure.
- ☐ Position the cursor on the required transaction in the tree structure and select Edit → Execute or press F2.
- ☐ Expand the command field and enter the transaction code.



Standard Tool Bar

- ❑ The Standard Toolbar contains the Command field and the standard SAP Toolbar buttons.
- ❑ **Command Field:** The Command field is used to enter transaction codes that take you directly to a system task without using menus.

Button	Keyboard Shortcut	Description	Button	Keyboard Shortcut	Description
	Enter Key	Enter/Continue		Ctrl + Page Up	First page
	Ctrl + S	Save to database		Page Up	Previous page
	F3	Back		Page Down	Next page
	Shift + F3	Exit System Task		Ctrl + Page Down	Last page
	F12	Cancel		None	Create New session
	Ctrl + P	Print		None	Create shortcut on Desktop
	Ctrl + F	Find		F1	F1 Help
	Ctrl + G	Find next		Alt + F12	Customize Local Layout



SAP Easy Access Settings

- ❑ **Users can set how SAP displays the Menu by choosing Extras → Settings. Here, you can specify whether:**
 - ❑ **Your favorites should appear before or after the menu.**
 - ❑ **Only your favorites, and not the menu, should appear.**
 - ❑ **The SAP Easy Access Graphic should appear on the right-hand side of the screen.**

The screenshot shows the 'Extras' menu in SAP. The menu items are: 'Display documentation' (Shift+F6), 'Technical details' (Shift+F11), 'Settings' (Shift+F9), and 'Set start transaction' (Shift+F7). The 'Settings' option is highlighted.

The screenshot shows the 'Settings' dialog box. It contains the following options:

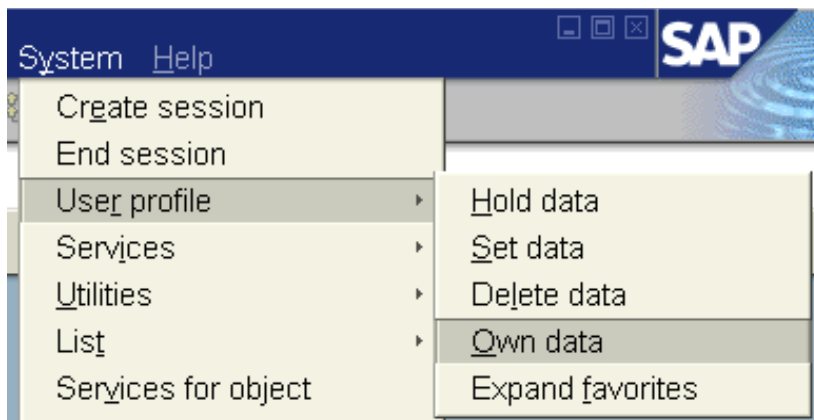
- ☐ Display favorites at end of list
- ☐ Do not display menu, only display favorites
- ☐ Do not display picture
- ☐ Display technical names

At the bottom of the dialog box, there are five icons: a green checkmark, a mouse cursor, a list icon, a document icon, and a red X icon.






USER Settings

- ☐ **Users can maintain their own settings by choosing System → User Profile → Own Data**
- ☐ **Defaults**
- ☐ **Change default printer, language, and date and decimal display formats.**
- ☐ **Parameters**
- ☐ **Allow user to create default information for frequently used fields.**





Messages

- ☐ Messages appear either in the status bar or in a pop-up window, depending on user settings
- ☐ Messages starting with:
 -  ☐ “E” indicate an Error message
 -  ☐ “W” indicate a Warning message
 - ☐ Messages not beginning with an “E” or a “W” are simply Information messages
-  ☐ Mandatory Required fields are denoted by a check mark

Main work center





Major **HELP** Keys

F1 – Information
about the field

F4 – Information
about Data to be
input



Remember

- Data once stored can't be deleted.
- Good or Bad, in SAP everything is highlighted.
- GIGO
[Garbage Input Garbage Output]
- Everything is monitored via logs



Requirements for End User Training

- **Administrative Requirements**

1. Proper trainees are nominated. Preferably the trainees who are doing the job in the respective field for which they have been nominated to undergo training. For example, trainees for MM module should preferably be working in MM / Store units and for FICO module training, Finance & Accounts wing persons to be nominated and so on.
2. Proper number of trainees are nominated. [Maximum two per training terminal]
3. There should be at least two trainers for end user trainings, one for conducting training and another to guide trainees at their respective terminals.
4. Sufficient time is kept for hands on practice.
5. Trainers for integrated modules are available for completing end to end process during training.
6. The ERP portal should be referred for all requirements like handouts etc.
7. In case the trainer finds that some more handouts or any other requirement should be on portal, he may co-ordinate with concerned module.



Requirements for End User Training

- **System Requirements**

1. Suitable number of training login IDs are available (Number of training terminals x 2). Please have 5 spare IDs created for some emergent requirement.
2. Basis Team at ALTTC Ghaziabad] may be contacted in advance to create the IDs. Contact details available on ERP Portal <http://10.197.216.213> Modules → Basis → Contact List
3. Networking availability / working to be ensured.
4. All the PC / Laptops are functioning properly.
5. SAP GUI is loaded on the PCs
6. All the login IDs are working.
7. On each terminal, login should be done once.
8. Projector is working properly.



**THANK
YOU**