Overview of Workforce Management

SAP Retail

http://help.sap.com/retail-wm
What is Workforce Management?

Store managers use SAP Workforce Management (WFM) to plan, create, and maintain employee schedules.

The process starts by defining your organization business variables and your locations; adding the employees you want to schedule for each location; and identifying the drivers which determine the levels of work necessary to complete each task at a location.

WFM takes this information and generates a forecast providing the best possible floor schedule while balancing such weighted variables as staffing needs, employee skill levels, payroll requirements, employee availabilities, and workplace rules.

The flexible forecasting within WFM:

● Allows you to model your location work to create a forecast that best represents your actual requirements.
● Enables you to effectively align your location workforce scheduling strategy with the goals of the corporation, the expectations of customers, and the career needs of your employees.
● Allows corporate management to make workload or forecast changes and send them down through their organization in order to control staffing requirements on an organization-wide basis.
Forecasting & Scheduling

Location (Org. Unit)
E.g. Stacija, Rega

Work Areas E.g. Cashier Desk & Warehouse

Assign Employees to Work Areas

POS transaction volume history

SAP Retail: Volume Forecast:
The store will sell 8000 bars per day

Demand Forecast:
(Workload per day)
• 80 hours at cashier desks
• 16 hours of shelf stacking

Task Types

Cashier

Volume Indicators

Shelf Stacking: 500 items per hour

Cashier: 100 items per hour

Schedule Employees to work areas

Employees work 8 hours per day therefore:
• 10 Cashiers required at 10 desks
• 2 Shelf Stackers required in the warehouse

Availability & Qualifications
Retail, a generic model

MASTER DATA MANAGEMENT

RETAIL SUPPLY CHAIN MANAGEMENT
- Replenishment
- Purchasing
- Inbound Logistics
- Inventory Management
- Merchandise Allocation
- Outbound Logistics
- Store Operations

MONITORING & REPORTING
**General Recommendation**

- Recommended WFM basic system landscapes
- Central deployment of SAP HCM on a separate SAP NetWeaver AS ABAP
- Exchange of organizational data and employee master data from HCM to WFM via IDoc
- Reuse of existing SAP NW Application Portal

**Benefits**

- Increased innovation speed due to independent innovation cycles for SAP WFM and SAP HCM (independent upgrade capabilities)

**Considerations**

- Data synchronization required
- Higher administration effort for set-up of integration scenarios
- Higher TCO due to additional server component
HCM-WFM Integration in a separated landscape

1. Outbound IDOC Creation (Report RBMDOC) -> IDOC Message Type HRMD_ABA
2. HCM_WFM_IDOC Inbound (Function module IDOC_INPUT_HRMD)

- Personal Actions: Like Hire, Transfer, Leaving, Reassignment
- Organization Management
- Synchronization of PA and CM (Report RBMSYSCMD)
- WFM-HCM Employee Maintenance (Transaction HRPWFM_PF)
- IDOC Message Type WFM_HRMD

Business Partner

WFM Tables

Organization Management

Personal Action View

WFM Portal
Setting up Workforce Management

Creating the Organization Hierarchy

You must define the highest level of the organization (that is, the root location) and the locations, either stores or departments, beneath it within the organization maintenance organization hierarchy.

Set up Schedule Rules (Shifts): You use work rule templates to maintain shift requirements. You assign a work rule template to employees when making them available for scheduling. You can set work rules and contract rules that can be adapted to meet regional and local legislations.

Assign employees to ‘work areas’: An example of a ‘work area’ is a checkout desk. Choose to enter either a single pay rate for all work areas or a pay rate for each work area.

Choose to configure employees so that they can be assigned to more than one work area during a single shift, when needed to cover tasks of short duration. E.g. Shelf stacking and checkout desk.

For example, an employee is needed to cover a short task at store opening. This task can be defined in a work area required for a timeframe of less than 1 hour. The system and employees can be configured to schedule a shift that covers the short core task and then extend this shift into an employee’s alternate work area as necessary to meet the employee’s minimum shift requirement.
Organization Hierarchy: Site Maintenance (TCODE: WFA_SM)
SET UP ‘Schedule Rules’

No integration with Infotype 0007
Work Areas

[Screen capture of a SAP Work Areas interface with various organizational units and work areas.]
Mapping Pay Rates between WFM and HCM

If you are integrating WFM to mySAP HCM in one logical system, you use this activity to map the HCM Wage Type to the WFM Pay Type.

Standard settings

In HCM, the pay rate is defined in *Wagetype*. *Wagetypes* can be either directly or indirectly valuated. Directly valuated wage type amount can be brought directly from HCM and cannot be changed in WFM. Indirectly valuated wage type amount can be maintained in WFM.

You must maintain this conversion as wage type and pay type can be defined in different rates. For example, wage type **M001** is defined as a weekly rate while the WFM pay rate **Hourly** is an hourly rate. So the conversion should be 40 ( = 5 working days * 8 working hours per day).

Infotype 0008

<table>
<thead>
<tr>
<th>EEGrp</th>
<th>ESgrp</th>
<th>Wage Ty...</th>
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<th>Convert Rate</th>
<th>IVal.</th>
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<td>U2</td>
<td>1000</td>
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<td>U4</td>
<td>1002</td>
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<td>1</td>
<td>U6</td>
<td>1000</td>
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</tr>
</tbody>
</table>
Employee Maintenance Screen

(1) Employees
(2) Absences
(3) Profile
(4) Pay Rates & Qualifications
(5) Work Area Assignments
(6) Shift Details & Rules
Absence Overview Screen

(1) Store

(2) Absences at the store

(3) Absence details
New Absence Integration using IDOC message exchange

1. Personnel Actions Absence (TA PA81)
   → Implementation of BADI HRPAD00INFTY
   → IDOC ATT_ABS
   → Mapping in WE35/WE36

report RTEXTPT

PTEXDIR, PTEX2000

→ IDOC ATT_ABS

→ Inbound BAPI

FM WFM_IDOC_OUTBOUND_ABSENCE

→ IDOC WFM_ABSENCE

WFM Tables WFA_TIMEOFFREQ

WFM UI
(Create New Absence)
DIFs: Demand Influencing Factors
e.g. Summer & Ice Cream

Forecasting & Scheduling
Managing Workforce Forecasts

Purpose: The forecast is an extrapolation of your expected overall business volume and workload. WFM uses the forecast as input when it generates a schedule.

Volume Forecast: The system generates a volume forecast by taking historical data for indicators to determine the expected volume for a defined future week.

Volume Indicator: The basic unit for forecasting. It represents a measure of activity, such as the number of items, transactions, sales dollars, customers processed, etc.

Demand Forecast: Once your changes are in place, the system then generates a demand forecast (or workload) by using the task definitions created during implementation to determine the number of employees needed each quarter hour of the day per work area.

Demand: Actual work that you need to accomplish - business activities such as cashiering, re-stocking

Task Types: Demand is configured into the specific task types. Task types are combined into ‘workloads’

Workloads: Volume indicators drive the workload which in turn, drive the forecast. The workload is the number of employees required every quarter hour to work in a particular work area, to meet an organization's service level.

Work Areas: Assign the workloads to work areas. Attach employees to the Work Areas as a part of the scheduling process.

Qualifications: Employee can have qualifications and work areas have requirements.
Defining Tasks

**Flowed Tasks** are driven by a business activity attached to a volume indicator, which must be performed at a specific time in response to the volume. In most cases, that time is the same time at which the volume is measured. *Sales, Cashier, and Greeter* are sample flowed tasks.

**Response Rate Tasks** are also driven by a business activity attached to a volume indicator, which must be performed no later than a specified time after the volume is measured. *Cleanup or Re-shelving* are sample response rate tasks.

**Queued Tasks** are very similar to response rate tasks, except they must also guarantee that a certain percentage, called the service level, of the volume is handled at a specific time. An example of a queued task is *Telephone Support*.

**Filler Tasks** generally define work that does not depend on when the business activity occurs. There are different types of filler tasks:

- **Variable Filler Tasks** are driven by a business activity attached to a volume indicator, but do not depend on when the activity occurs. *Service Recovery* is a sample variable filler task.

- **Fixed Filler Tasks** require a set amount of time to complete, regardless of other activities, and are typically performed at a defined time of day during off peak times. *Administrative Work* is a sample fixed filler task.

- **Mandatory Tasks** require a fixed amount of time applied to schedule coverage requirements and do not depend on any business activity. *Security* is a sample mandatory task.
**Forecasting & Scheduling**

**Location (Org. Unit)**
E.g. Stacija, Rega

**Work Areas** E.g. Cashier Desk & Warehouse

**Assign Employees to Work Areas**

**POS transaction volume history**

**SAP Retail: Volume Forecast:**
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**Task Types**
- **Shelf Stacking**
- **Cashier**

**Volume Indicators**
- **Shelf Stacking:** 500 items per hour
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**Schedule Employees to work areas**
Employees work 8 hours per day therefore:
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**Availability & Qualifications**
Business Need: Scheduling a task of short duration using employees that are normally assigned across different work areas

Example: Opening/Closing a store requires a trusted employee with key code access scheduled in before store opening and after store closing to lock/unlock the doors. This task is for a short duration and the employee will then move into their regularly scheduled work area for the remainder of their shift.
Criteria for which alternate work area of an employee is selected, in the order listed:
- Work area with the greatest understaffing
- Work area with the least amount of over staffing
- Work area with the greatest demand

Assign qualified employees to Key Holder Work Area

Configure employees for “Multi-Segment”
- Set “Multi Seg Enabled” flag for all work areas involved
- “Min/Max Time” in segment defined for each work area
Results in each key holder task segment being scheduled by an employee who then transitions into another work area for the remainder of their shift.
Using SAP ESS within WFM

Organizations can use standard SAP Employee Self Service (SAP ESS) processing to allow their employees to enter and update permanent and temporary schedule rules information and send these changes to a manager for approval.
WFM ESS

Requests

When you have implemented WFM ESS processing, employees can request changes to specific schedule rules items, such as availabilities, preferences, and set shift information, and send the requests to their manager for approval.

Approving Employee WFM ESS Schedule Requests

When you have implemented WFM ESS processing, store managers can receive schedule change requests and either approve or reject the employee requests. When a manager approves the request, WFM applies the changes to the employee's schedule rules for the schedule week within the request.
Clocking in: Employee View

2013/02/28
03:30:39

Please enter ID:

Password:

- Punch In
- Select Work Area
- Transfer Work Area

- Break Start
- Break End
- Meal Start
- Meal End
- Punch Out

- Refresh iTime Clock
- View Punches
- View Schedules
The Store Manager’s Portal

• Ensure all employees hired since the last schedule was produced are available for scheduling.
• Enter employee changes since the last schedule was produced so that they are reflected in the new schedule.
• Ensure schedule events such as training sessions or team meetings are added in advance so they can be included within the new schedule.
• Ensure volume forecasts and workload exist and account for campaigns, seasonality or any other parameters.
• Calculate the new schedule.
• Update the new schedule with changes prior to the actual schedule week.
• Post the calculated schedule.
• When you have implemented iTime Clock, review and edit employee working time and export pre-payroll calculations.
• Approve or reject schedule rules changes created by employees when you have implemented SAP Employee Self Service (SAP ESS) processing.
### Reporting & Analysis

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Schedule (Adobe)</td>
<td>A printable report of the weekly schedules for a selected week.</td>
<td>Operational report</td>
</tr>
<tr>
<td>Daily Coverage (Adobe)</td>
<td>A printable report of the scheduled shifts for a selected day.</td>
<td>Operational report</td>
</tr>
<tr>
<td>Weekly Schedule</td>
<td>This is the primary report that the location manager uses to communicate the schedules to employees. It would typically be printed out and physically posted inside the location.</td>
<td>Real-time report</td>
</tr>
<tr>
<td>Schedule Events</td>
<td>The schedule events for the organization unit, for the period specified.</td>
<td>BW report</td>
</tr>
<tr>
<td>Individual Schedule</td>
<td>An employee's weekly schedule.</td>
<td>Real-time</td>
</tr>
<tr>
<td>Daily Coverage (Coverage Portion)</td>
<td>Used as a summary to identify areas of under/overstaffing throughout the day and/or week as well as to identify coverage for specific time periods.</td>
<td>Real-time</td>
</tr>
<tr>
<td>Daily Coverage (Schedule Portion)</td>
<td>Displays the number of people available for coverage, minus events, meals, and breaks.</td>
<td>Real-time</td>
</tr>
<tr>
<td>Statistics</td>
<td>Key statistics used by location managers, field managers, and corporate operations managers to monitor performance and budgetary constraints.</td>
<td>Real-time</td>
</tr>
<tr>
<td>Business Volume</td>
<td>This report is typically used by the location manager to monitor and update volume forecasts based on location variables.</td>
<td>Real-time</td>
</tr>
<tr>
<td>Schedule Exceptions</td>
<td>For a specific schedule week, provides either a summary of the total number schedule exceptions for the organization or organizational area or a list of schedule exceptions by selected employee.</td>
<td>BW report</td>
</tr>
<tr>
<td>Headcount</td>
<td>Provides the number of people schedule to work at any given time or period of time during the day. Managers use this report to ensure that the appropriate staffing is in place for the location.</td>
<td>BW report</td>
</tr>
</tbody>
</table>
Workload Analysis

Reviewing the Workload
You view workload details for an org unit (location, department or work area) for a specific forecasting week on the Workload page of the manager’s portal.

Example: On the workload graph the horizontal axis is in hours, set in 15 minute increments. Vertical axis is in the number of people with the scale changing to reflect your staff requirements.
• **Business Objects Dashboards**
Advantages of Using WFM

- **Employee Qualifications:** Work Areas staffed by qualified employees
- **Employee Availability:** Absence and attendance automatically update scheduling
- **Employee Utilisation:** Visibility of demand and availability. Automatic Scheduling.
- **Employee Cost:** Better visibility of cost implications of scheduling (hourly rates)
- **Integrated Scheduling:** Sales Forecast drives accurate scheduling
- **Customer Service:** Maintain appropriate staffing levels
- **Reporting and analysis:** Detailed analysis of utilisation, productivity and cost.
- **Administration:** Reduced paper-based planning and scheduling

The result is an optimal schedule, and even more, scheduling is transformed from a necessary, tedious, clerical function into an analytical, cost-effective, business management process.
Disadvantages of Using WFM?

• Use Benefits Validation Document: [Benefits Validation]
  [http://www.nicx.co.uk/attachments/File/Benefits%20Validation%20-%20Introduction%20Blank.pdf]

• WFM Cost Implications:
  • Configuration
  • Development
  • Licensing
  • Support

• PI Cost Implications:
  • Configuration
  • Development
  • Licensing
  • Support

• Payroll/HCM integration
  • Overtime
  • Substitutions
  • Workshedules
Figure 148: TMW Calendar Views: Weekly Calendar
Figure 149: TMW Calendar Views: Monthly Calendar
- For customized color display

- The team view is expanded for the selected days
- The selected employees can be processed in the team view

Figure 151: TMW Team View