

VE4RE – Visual Real Estate Management

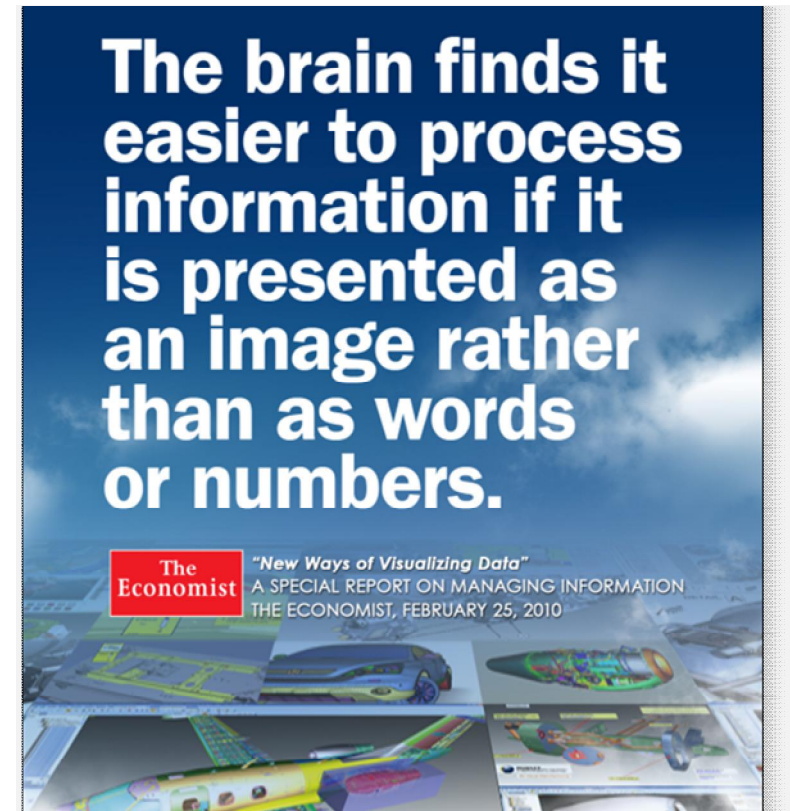
on SAP 3D Visual Enterprise and Real Estate Management Services

V1.0 Customer Presentation (EN/ed1.7/03.16)



SAP Real Estate Management

- Y The visualization of property space and buildings provide the basis for new business process design approaches within SAP Real Estate Management (RE-FX).
- Y The services integrates SAP 3D Visual Enterprise and provides enhanced business process scenarios.
- Y Hence Visual Real Estate Management by SAP provides an improved “User Experience” and eases the use of SAP Real Estate Management functions and transactions.



Visual Real Estate Management with SAP 3D Visual Enterprise

- ✚ In the past SAP 3D Visual Enterprise mainly focussed on technical related business processes from the areas Enterprise Asset Management and materials management.
- ✚ Answering to the increasing demand of our customers to visually support property and real estate related business processes also, we have enhanced SAP Real Estate Management to integrate and interact with Viewer and Link from SAP 3D Visual Enterprise product family.
- ✚ Supporting enhancement- and implementation services and predefined business process package bring „Visual Real Estate Management by SAP“ to a complete solution.

The image displays the SAP 3D Visual Enterprise product family, which includes modules for Visual Development, Visual Product Navigation, Visual Analytics, Visual Manufacturing, Visual Operations, and Visual Service. A large yellow plus sign indicates the integration of these modules with SAP Real Estate Management. Below, a screenshot of the SAP interface shows a 3D model of a building, a floor plan, and a data table.

ID	Name	ToolTip	FIRST_VALUE	PART_ACD	SPACE_AREA	DRW_UNIT	PARENT_ARCH_OBJECT_ID
IR4D000113	Object #810			CL.000	0.09		
IR4D000114	Object #817			CL.000	0.08		
IR4D000115	Object #818			CL.000	0.04		
IR4D000116	Object #819			AG.55	0.00		
IR4D000117	Object #820			BE.02	0.01		
IR4D000118	Object #821			BE.02	0.12		
IR4D000142	Top_Brick					INCHES	DE-DE-WDF-WDF01006 2014-09-01

Visual Real Estate Management by SAP

Navigating from a map into building, into a floor to manage spaces

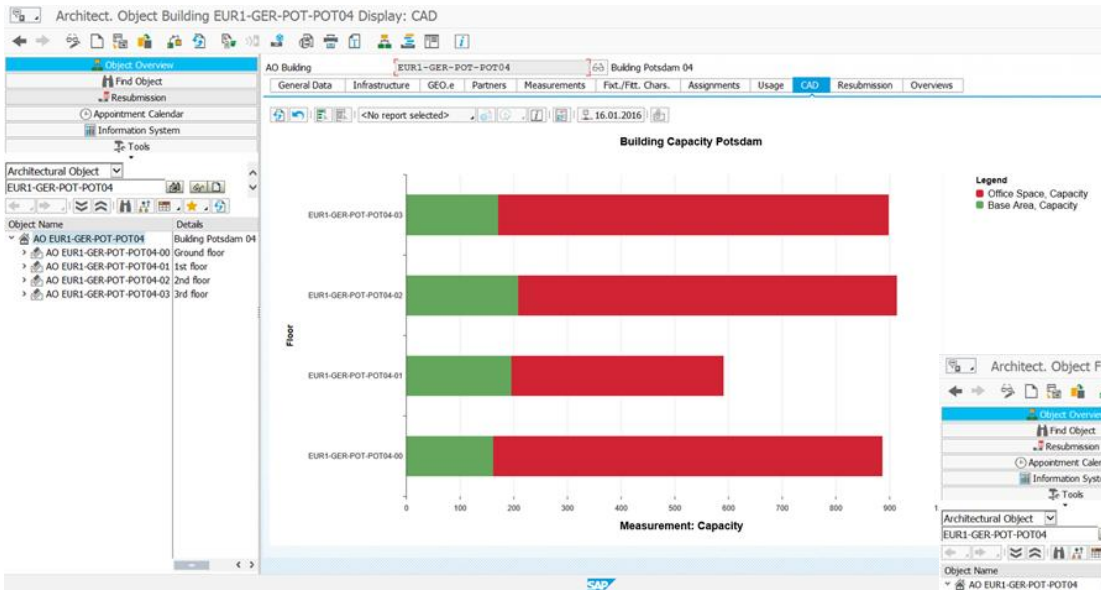


Map navigation using SAP GEO.e

Drilling into a building showing a 3D Model using SAP 3D Visual Enterprise

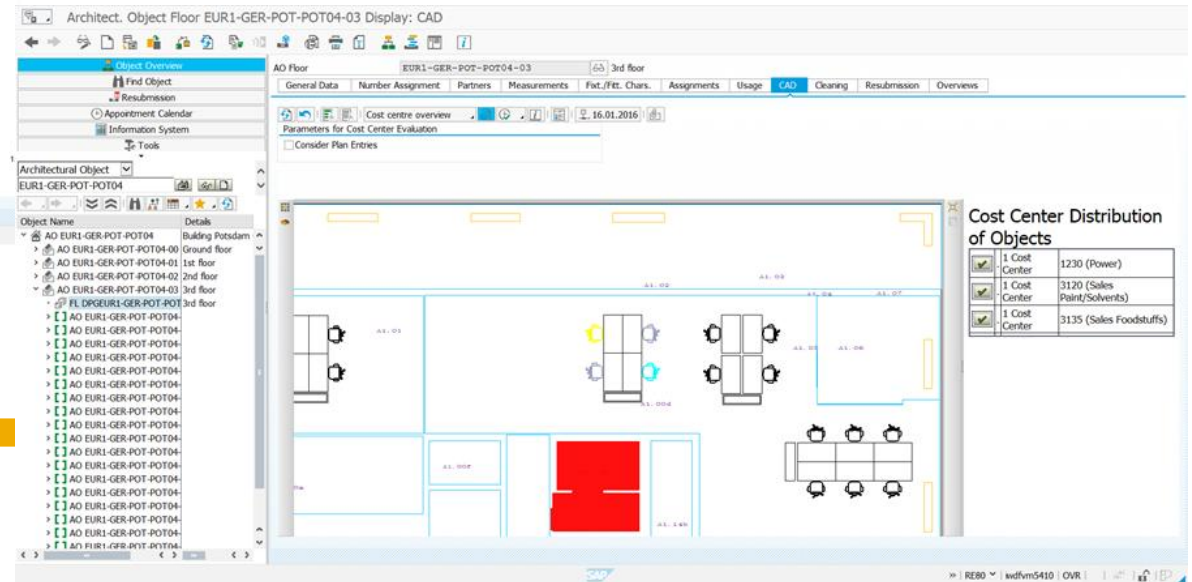
SAP Visual Real Estate Management

Navigating from a map into building, into a floor to manage spaces



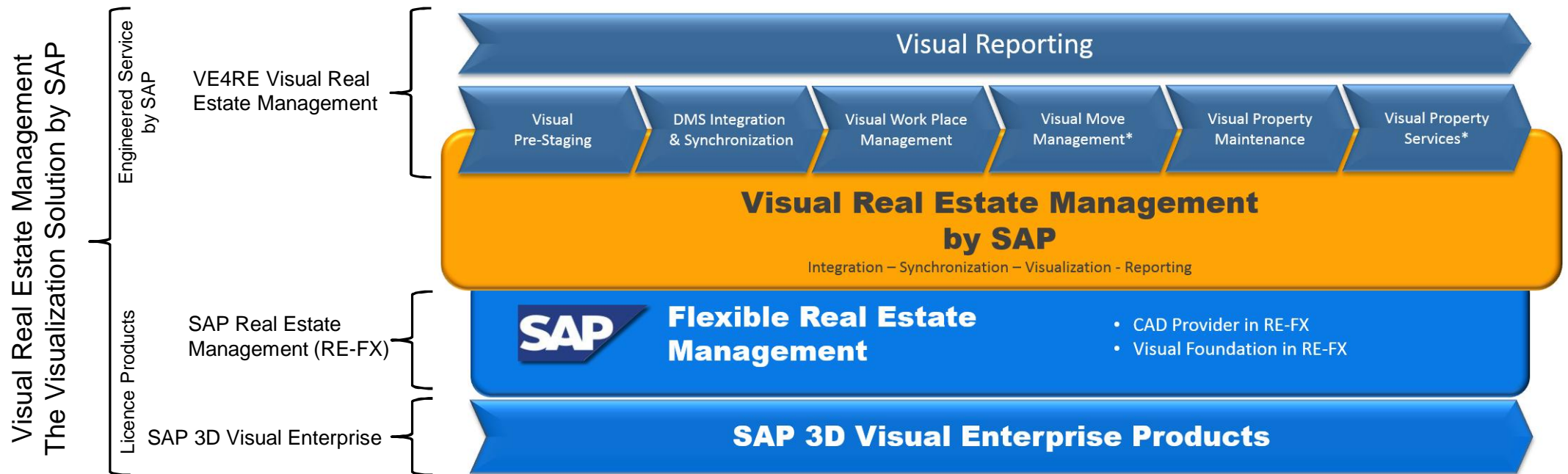
Visual reporting using stacked diagrams representing all floors of a building

Drilling into a floor to manage individual spaces visually and interactively



VE4RE - Visual Real Estate Management by SAP

The Visualization Solution by SAP



*Examples for possible future enhancements

- Y The solution „Visual Real Estate Management“ is a billable Engineered Service provided by SAP
- Y It uses the standard functionality of Real Estate CAD provider and the foundation and integrated the SAP products SAP 3D Visual Enterprise Link and Viewer into SAP Real Estate Management
- Y The service is configurable and provides, in addition to the display of floor plans, business process support like Workplace Management and Property Maintenance.

Integration visual plans into SAP Real Estate Management



- Y Since EhP 2 SAP Real Estate Management provides the technology to link external CAD systems and other graphical systems into Real Estate using the CAD provider
- Y Now, SAP Real Estate Management
 - integrates SAP 3D Visual Enterprise Viewer to visualize building plans
 - integrates SAP 3D Visual Enterprise Link to to prepare plans e.g. in DWG-format as well as formats like PDF and TIF
 - uploads plans into SAP DMS of SAP ERP
 - synchronizes plan data with Real Estate data
 - displays interactive plans for visual reporting



Foundation of Visual Real Estate Management*



- ÿ Connect SAP 3D Visual Enterprise to RE-FX CAD Provider
- ÿ Integrate SAP 3D Visual Enterprise Viewers into RE-FX (RE80)
- ÿ Upload plans into DMS
- ÿ Visualize building plans directly in SAP GUI CAD-Tab of RE-FX
- ÿ Extended Configuration Framework

The screenshot displays the SAP GUI CAD-Tab interface. On the left, the 'Object Overview' panel shows a tree structure for the architectural object 'EUR1-GER-WDF-WDF01'. The tree includes 'Object Data', 'Subordinate Objects', and 'Architectural Objects'. Under 'Architectural Objects', there are entries for 'Ground fl...', '2nd floor', '3rd floor', '4th floor', and '5th floor', all with '[Unlimited]' status. The main area shows a floor plan visualization of the 'Ground floor' for 'AO Floor' with ID 'EUR1-GER-WDF-WDF01-00'. The plan is divided into two sections, 'A' and 'B'. Section A contains various rooms and corridors, while Section B shows a large open area with a central structure. The plan is annotated with numerous alphanumeric codes (e.g., AE 01, BE 01, CE 01) and symbols. The interface includes a top menu bar with options like 'General Data', 'Number Assignment', 'Partners', 'Measurements', 'Fixt./Fitt. Chars.', 'Assignments', 'Usage', and 'CAD'. A toolbar below the menu bar contains icons for navigation and editing. The date '22.10.2015' is displayed in the top right corner.

*Availability and Delivery Details see SAP Note 2255568

Visual Enterprise Service Portfolio



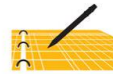
SAP Real Estate Management Visual Real Estate Starter Pack

Visual Pre-Staging
DMS Integration & Synchronization



- § CAD Verification
- § CAD Translation
- § CAD Post-processing
- § Lightweight File Generation
- § DMS Upload
- § SAP Object Creation
- § SAP Object Linkage
- § Data comparison
- § SAP Object Update

SAP Real Estate Management Visual Workplace Management



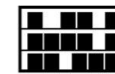
- § Workplace Overview
- § Workplace Assignment
- § Workplace Reporting

SAP Real Estate Management Visual Property Maintenance



- § Equipment Overview
- § Equipment Insight
- § Defect Management
- § Notification

SAP Real Estate Management Visual Move Management



- § Workplace Move Scenarios
- § Visual selection of source and target rooms
- § Overview of current move plans

SAP Real Estate Management Visual Reporting



- § View 3D Models and Animations
- § View Interactive Plans
- § Interactive Reporting

Optional Add-On:

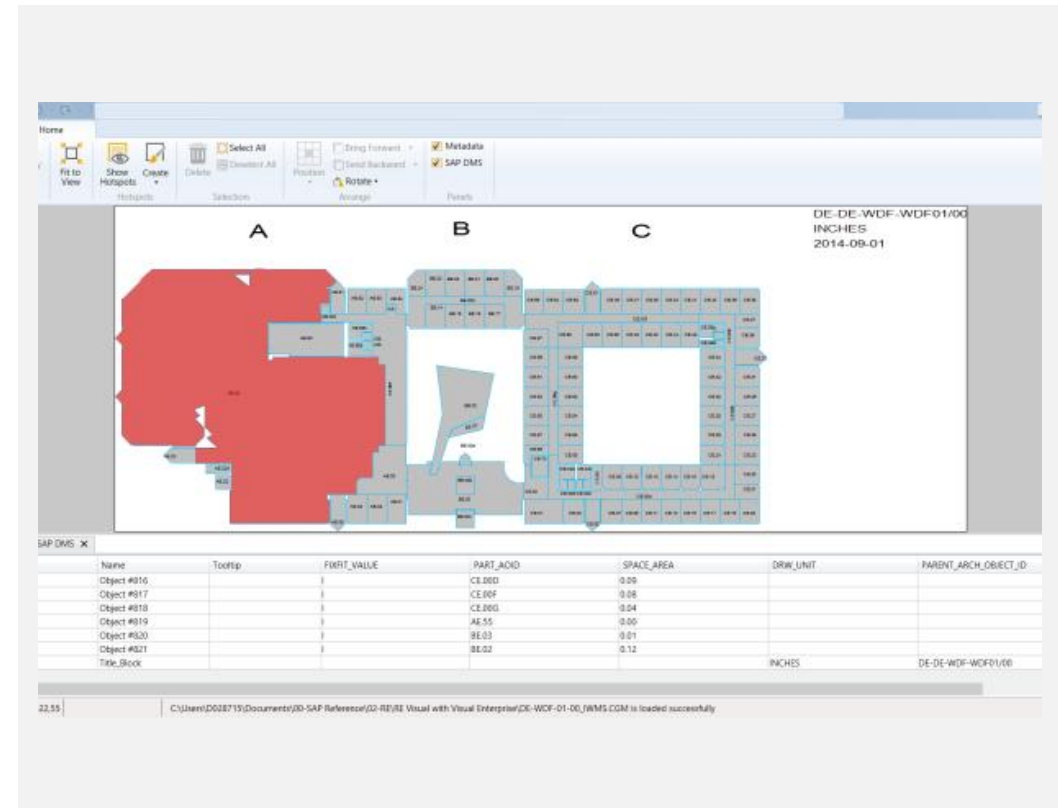
- § Bulk Upload and Synchronization

Pre-Staging



SAP 3D Visual Enterprise Link

- Handling of different plan source formats, e.G. DWG, TIF, PDF, PNG
- Check, Quality check support, processing and updates to plans with visual and text-based data
- Business process related plan updates
- Ad-hoc plan changes and enrichment
- Lightweight File Generation
- Upload into DMS of SAP ERP



DMS Integration & Synchronization

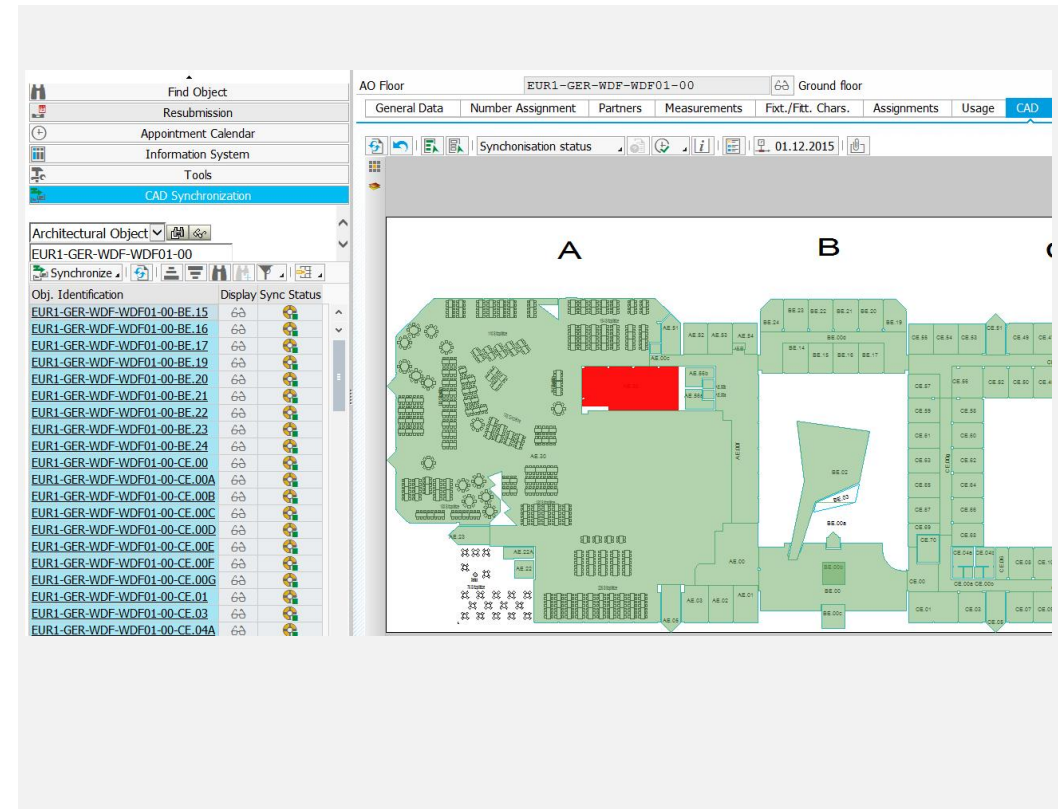


SAP Real Estate Management RE80 and SAP 3D Visual Enterprise Viewer

- ÿ Upload and Linkage with DMS (SAP ERP)
- ÿ Compare current data
- ÿ Synchronize plan and master data
- ÿ Creation and Linkage to SAP objects
- ÿ Navigate and drill-down into RE-FX-transactions and vice versa
- ÿ Visual Reporting using standard reports and flexible enhancement technology

Optional Add-On:

- ÿ Bulk-Upload and bulk-synchronization of plans

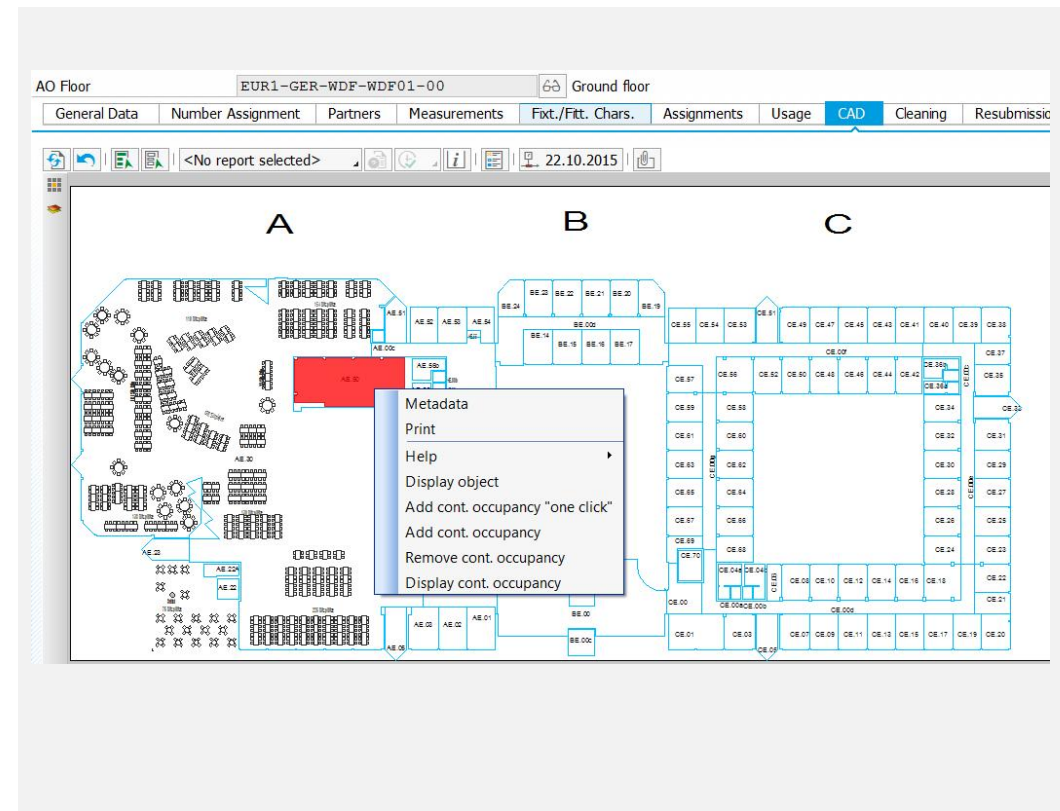




Visual Workplace Management

SAP Real Estate Management RE80, SAP 3D Visual Enterprise Viewer and Visual Workplace Management Service by SAP

- Y Overview on current property usage
- Y Overview on historical and planned usage
- Y Smart occupancy management
- Y Flexible occupance handling
- Y Visual Workplace Reporting

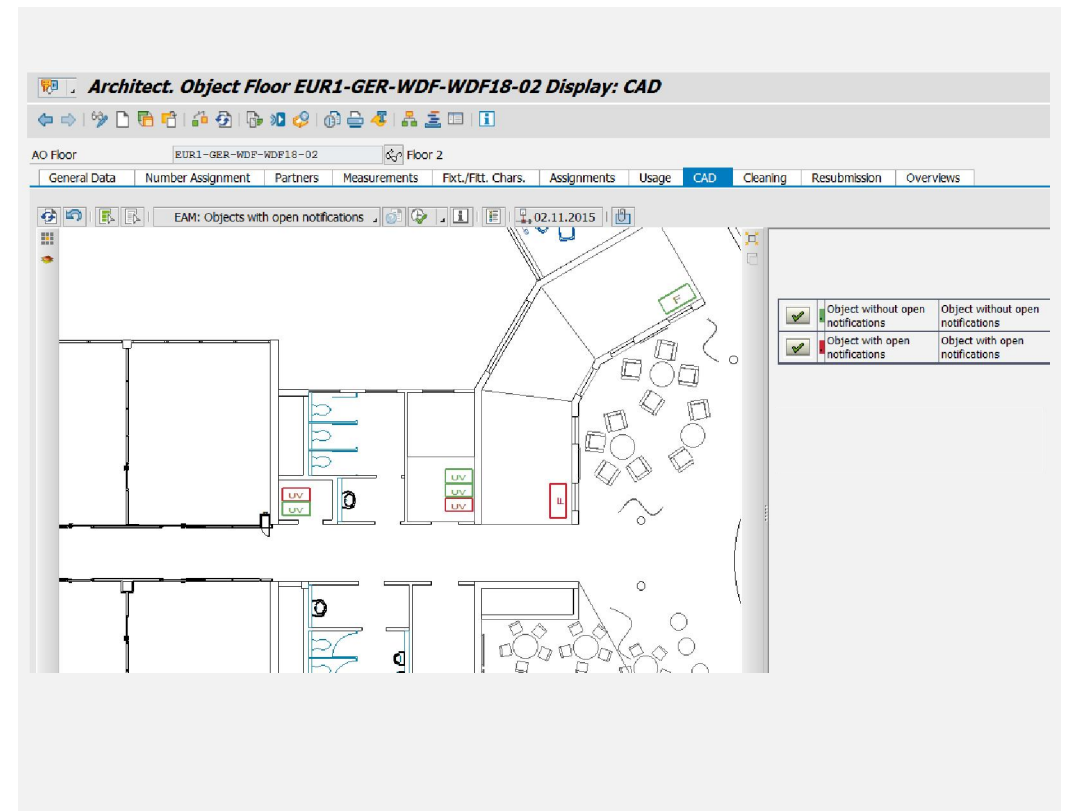


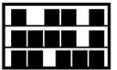


Visual Property Management

SAP Real Estate Management RE80 and SAP PM, SAP 3D Visual Enterprise Viewer and Visual Property Maintenance Service by SAP

- Y Visual equipment overview
- Y Information in equipment details
- Y Notification Management, Order Management





Visual Move Management

SAP Real Estate Management RE80, SAP 3D Visual Enterprise Viewer and Visual Move Management Service by SAP

- Y Workplace specific assignment
- Y Move plans
- Y Activation of move plans

The screenshot displays the SAP Visual Move Management interface for the 3rd floor. The main view shows a floor plan with room numbers (A1.00F, A1.10, A1.14b, A1.17, A1.00d, A1.06) and furniture icons. A table on the right, titled 'Persons Moving in Planning', provides a summary of the planning status for each room.

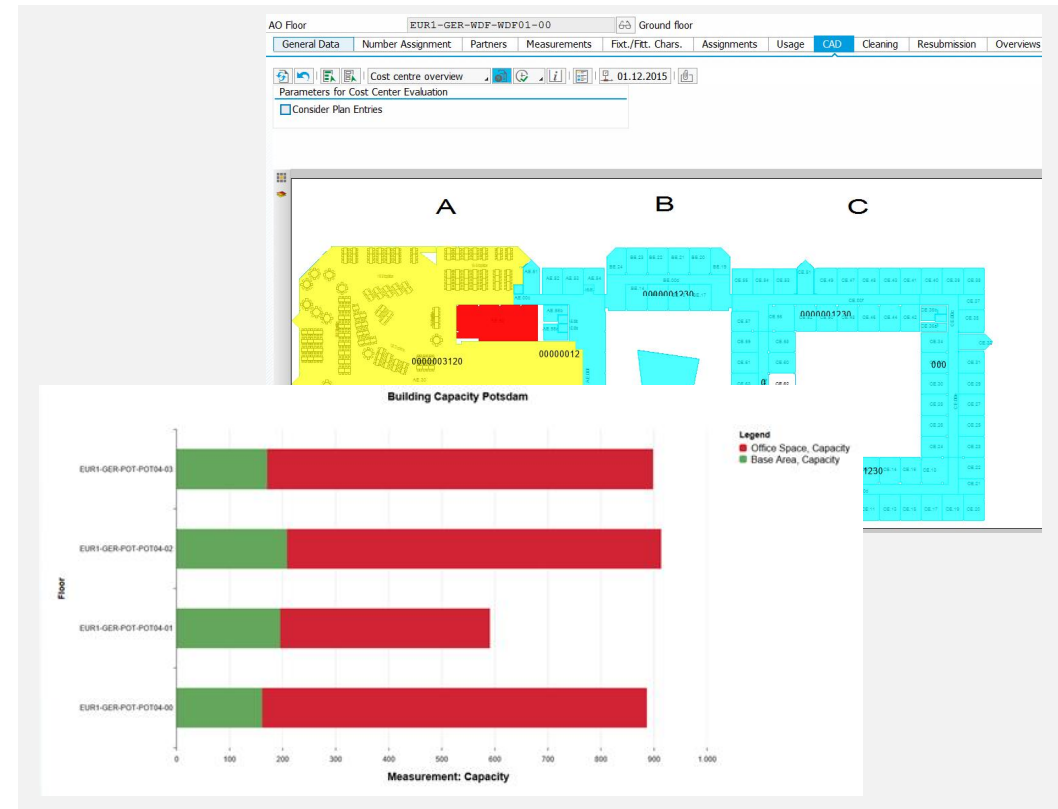
Planning Status	Description
<input checked="" type="checkbox"/> Available	None of the occupants is already planned
<input checked="" type="checkbox"/> Partially Planned Elsewhere	Some of the occupants are planned in a different move planning
<input checked="" type="checkbox"/> Partially Planned Here	Some of the occupants are planned in the current move planning
<input checked="" type="checkbox"/> Planned Here	All of the occupants are planned in the current move planning
<input checked="" type="checkbox"/> Other Plan	All of the occupants are planned in a different move planning

Visual Reporting



SAP Real Estate Management RE80, SAP 3D Visual Enterprise Viewer and Visual Reporting Service by SAP

- ÿ Display 3D models
- ÿ Display interactive plans
- ÿ Reporting and coloring bases on reporting criteria
- ÿ Building insight using stacking



Prerequisites and Availability (Excerpt)

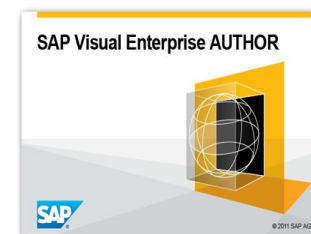
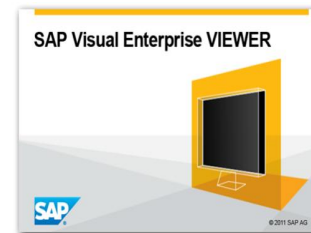


**Work Place
Management
Consulting
Service
Add-On**

**Property
Maintenance
Consulting
Service
Add-On**

**Move
Management
Consulting
Service
Add-On**

**Additional
Consulting
Service
Add-Ons**



Availability and prerequisites see
SAP Note 2255568

SAP Real Estate Management

SAP ERP ECC 6.0 with

EhP 6 SP 12 / EhP 7 SP 5

SAP_BS_FND from 702 SP16

Consulting Implementation Service

SAP 3D Visual Enterprise Viewer
Version 8.0 SP04 or higher

SAP 3D Visual Enterprise Author
Version 8.0 SP04 or higher

For users to modify and upload /
synchronize plans

AutoCAD Version 10 or higher



Contact

realestate@sap.com

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