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SAP Visual Enterprise Viewer Mobile Application FAQ

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Q: What is the SAP Visual Enterprise Viewer mobile application?
A: The SAP Visual Enterprise Viewer enables users to view, zoom, pan and rotate interactive 3D data, play step-by-step animations and visualize content created with SAP Visual Enterprise suite of products.

Q: Who are the targeted end users?
A: Assembly and maintenance/service technicians.

Q: What SAP LOB's & solutions does this application support?
A: EAM, PLM and Mfg.

Q: What are the benefits of SAP Visual Enterprise Viewer?
A: Companies will benefit by increasing uptime of mission critical products and assets, improving productivity and maximizing utilization of assembly and maintenance technicians.

Q: What are the key features of the SAP Visual Enterprise Viewer?
A: Key features of SAP Visual Enterprise Viewer

- Easily zoom, pan, and rotate data using standard multi-touch gestures
- View animated step-by-step 3D visual work instructions created with SAP Visual Enterprise Author
- Interact with large, complex 3D CAD assemblies converted with SAP Visual Enterprise Generator
- Select parts or assemblies to view CAD and SAP business information
- Search, hide/show, and isolate parts and assemblies, and hide/show step-by-step instruction text

Q: What mobile devices and operating systems will be supported?
A: Version 1.0 will support Apple iPad's 2 & 3 running iOS 5.1

Q: Will you support Android tablets?
A: Yes in 2013.

Q: When will the product be available?
A: Release to Customer (RTC) will be Q3, 2012.

Q: What is the end user cost/license of SAP Visual Enterprise Viewer?
A: The current pricing is Free, Just like the SAP Visual Enterprise Viewer for Win 32.

Q: How does SAP make any money?
A: SAP makes money by selling the SAP Visual Enterprise suite of products (SAP Visual Enterprise Generator, Navigator, Author and Analytics) and the Services required to implement those solutions. Sales should be focused on the business value that the SAP Visual Enterprise solutions bring to the various SAP LOB's such as PLM, EAM, Mfg. (See the SAP Pricing Guidelines & Sales Collateral)

Q: Does this application use SAP Sybase Unwired Platform (SUP)?
A: No this is a standalone application, and does not directly integrate with the SAP backend. When CAD data is stored in SAP PLM, the CAD data is processed/converted by SAP Visual Enterprise Generator to high performance .VDS 3D Model files. During the conversion process SAP Visual Enterprise Generator also applies the SAP Material ID onto each part/assembly in the 3D model. This enables integration to the SAP Business Suite and associated business data.

Q: How does this mobile application add value to existing SAP solutions & processes?
A: The primary use case of this mobile application is to enable EAM maintenance technicians to view interactive 3D step-by-step animations. So the quickest way to get to market and provide value to the EAM solution is to use the existing processes of attaching files/documents in the SAP backend to a Work Order. These attachments are then synchronized to the maintenance technician using Syclo's SMART Work Manager mobile application, and Syclo's Agentry Server. So in effect Syclo's SMART Work Manager mobile application is the delivery mechanism of (.VDS) files from the SAP backend to the standalone SAP Visual Enterprise Viewer. While not a complete integrated end to end solution, it is a very important process of delivering the 3D data seamlessly to the end users mobile device.

Q: Will this 3D technology be available in other SAP mobile applications or SAP partner applications?
A: Yes, the SAP Visual Enterprise Viewer mobile application is based on the SAP Visual Enterprise Developer SDK for Apps. This SDK will enable other SAP mobile application development teams to directly integrate this viewing technology into an existing or future SAP mobile application.

Q: Will you support Smartphones?
A: While technically possible, our target devices for realistic and meaningful 3D gestures and 3D object interaction requires mobile tablets 7 inches & larger iPhone support has been disabled for the v1.0. release.

Q: Why does the SAP Visual Enterprise Viewer not support Apple iPad version 1?
A: Technically it does, but the Graphics Processing Unit (GPU) is 5-7X slower than the iPad 2 & 3. While smaller Visual Design Streaming (.VDS) 3D files may perform satisfactorily, we believe the iPad 2 & 3's provide a much better end user experience when visualizing 3D data. Our minimum hardware requirement will be iPad 2 or above.

Q: What 3D file format does the viewer read?
A: The SAP Visual Enterprise Viewer reads and displays Visual Design Streaming (.VDS) 3D files.

Q: What are the advantages of (.VDS) 3D file format?
A: The advantage of the (.VDS) file format is its ability to efficiently display massive and complex 3D models created with 3D Computer Aided Design (CAD) applications. SAP believes that by using (.VDS) files on mobile devices we can visualize much larger and complex 3D files while maintaining high rendering speeds measured in Frames per Second (FPS). The rendering frame rate is important to the end users experience when manipulating the 3D model and viewing animations.

Q: How does an end user create (.VDS) files?
A: End users can save (.VDS) files using SAP Visual Enterprise Generator 7.0 with the SAP Service Market Place (SMP) August 2012 maintenance patch, or using SAP Visual Enterprise Author 7.0 with the August 2012 maintenance patch VEA700P_3-10011890.ZIP. All future releases of both Visual Enterprise Generator / Navigator 7.1, and Author 7.1 will not require these specific maintenance patches.

Q: Why are you not reading (.RH) 3D file formats?
A: The (.RH) file format is a great 2D/3D file format. It is the workhorse and foundation of the SAP Visual Enterprise. However, we believe that the high performance capabilities of the (.VDS) file offer significant advantages not only on the desktop, but also on mobile devices. A good graphical format metaphor is a Photoshop file. A Photoshop file is great for authoring 2D content, but when you want to create the most efficient 2D file to distribute and view, one exports to a JPEG or PNG file format to view within a web pages or on a mobile device.

Q: Are the (.RH) file format capabilities fully supported within the (.VDS) format?
A: The (.VDS) file format was specifically designed to support mobile delivery with its ultra lightweight structure, high-performance distribution and file streaming capabilities. The (.VDS) file is not yet 100% equivalent to the (.RH) file and some capabilities of Visual Enterprise Author are not currently supported with, (.VDS) files. Today, our focus for the (.VDS) file format has been to enable step-by-step 3D visual work instructions for maintenance and assembly technicians on the Apple iOS. We believe the (.VDS) file format will fully support this requirement and we will continue to enhance the (.VDS) file format capabilities in the future to support other mobile based workflows.

Q: What size of (.VDS) files can displayed?
A: 3D file sizes are dependent on many variables such as number of parts /assemblies, textures / materials, metadata and polygon count. So within the 3D visualization industry the standard measurement of file size is typically based on polygons. The SAP Visual Enterprise Viewer for iPad can display 6.5 million polygons, and still maintain reasonable 3D interaction and navigation. On device / disk 3D (.VDS) file sizes of 40 - 50 Mb. While larger files can be loaded and displayed, the end user experience will very dependent on variables within the 3D file, and the amount of RAM on the mobile device. Please note that the iPad 2 has 512 MB RAM vs. iPad 3 with 1024 MB RAM. This means that the iPad 3 can potentially load and display (.VDS) files that will not load on the iPad 2.

Q: What is the process for synchronizing / downloading (.VDS) files to the iPad?
A:

- Manually synchronize (.VDS) files via iTunes
- Send (.VDS) files via e-mail as attachments
- Host the (.VDS) files from a web server and hyper link to download and Open in VE Viewer
- Upload (.VDS) files to a cloud based file sharing solution such as Box and then use the free Box mobile application for iPad to download (.VDS) files to the iPad > Select File > Click "Cloud" Icon > Open In > VE Viewer