A GUIDE TO REVIEWING VIRTUAL-WORKSPACES™

AN OVERVIEW OF RELEVANT TERMS, THE PRODUCT FEATURES, INSTALLATION, AND EVERYTHING ELSE A REVIEWER NEEDS TO KNOW ABOUT VIRTUAL-WORKSPACES™

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WELCOME

This document offers an overview of VirtualDesign Network's Virtual-WorkSpaces™. Use it to familiarize yourself with the fundamental terms, features and concepts of benefit in describing, understanding and evaluating the product. It is important to understand that Virtual-WorkSpaces is not an application, but is a web-based collaboration toolset. When you have read this document, you should be able to log in to the website and be familiar with the tools available to you. This document is not intended to offer a detailed technical description of Virtual-WorkSpaces. The technical details and step-by-step procedures for using the site can be found in the online Help system that is available. You are encouraged to make full use of the Help for answering questions you encounter during your evaluation. Initially, use the Help system's Table of Contents to browse through the information as you would with a traditional user's guide. After you are actively using Virtual-WorkSpaces, the Help system's Index feature may be more suited to finding information.

KEY TERMS USED IN VIRTUAL-WORKSPACES

Following are terms used throughout descriptions of Virtual-WorkSpaces:

CSP — Collaboration Services Provider

Conferences — There are two distinct types of conferences: webconference and file conference. A webconference uses the Conferences tool in the Virtual-WorkSpaces and includes multi-point, real-time video and full-duplex audio, along with chat, whiteboard and desktop sharing. A file conference is completely different and is a function of the Files data island. A file conference allows several people (members of the same project) to view and manipulate a file. When the two conference types are used simultaneously, true online collaboration is the result.

Dialog (box) — An interactive window that accepts data and launches an action or series of actions.

Dock/undock — Docking refers to the position of a video window. A docked video window is anchored to its place in the viewing area of the Videoconference window. When it is undocked, you are free to move it to anywhere on the screen.

File conference	A conference that is specifically for multipoint file viewing. The initiator of a file conference (conference host) can change the orientation, create markup, or zoom a viewed file with the Virtual-Workspaces Viewer, or pass markup control to another participant. Control can be reasserted by the host at any time. You can also download a file from Virtual-WorkSpaces to your local machine.
Markup layer	A virtual layer that accepts the placing of graphics and text that is superimposed on a file being viewed from multiple locations.
Navigation tree	The area at the left-hand side of the browser view of Virtual-WorkSpaces, where you can expand, collapse, and enter any hierarchical level in a project (see "Project").
Profile	A collection of information specific to an individual user of Virtual-WorkSpaces, which includes Name, Username, email address, and so on.
Project	A fundamental concept. All hierarchy in Virtual-WorkSpaces is project-based. A project is a collaboration of people around a central task. Before initiating a conference, you must first create a project. Virtual-WorkSpaces is not a project management tool, per se, but is a powerful tool set that serves as a useful adjunct to all members of a project, engineers, other creatives, and project managers too.
Tunnel	Tunnels are secure pathways (currently, 168-bit encryption technology) that enable data to move back and forth between your computer and the VirtualDesign Network server. A tunnel is what is established when installing the VPN client. See "VPN."
Viewer	A collaborative Java-based application that enables the multipoint viewing of files (file conference) with markup capability. Control of the markup layer may be requested by any conference attendee, or reassumed at any time by the host (initiator) of the file conference. The Viewer is best used in conjunction with a webconference, where video, audio, and file viewing all happen in real time. The Viewer also has a 'View Only' option which allows you to view a file without starting or joining a file conference. Files located in Virtual-WorkSpaces may also be downloaded to your local machine.
VPN	Virtual Private Network. This is the communication package that enables you to create and manage tunnels. The primary task of getting set up to log into Virtual-WorkSpaces is installing the VPN client. See "Tunnel."
Webconference	The simultaneous sharing of video and audio data, in real time, from several different locations.
WorkSpace	An individual's Virtual-WorkSpaces desktop, accessible with the browser.

VIRTUAL-WORKSPACES EXECUTIVE SUMMARY

VirtualDesign Network™ is a Collaboration Service Provider (CSP). We offer a full-service professional collaborative tool set (Virtual-WorkSpaces™) where individuals and companies can collaborate, regardless of different geographic locations. These tools are optimized to run across the Internet on broadband technologies. Virtual-WorkSpaces™ enables the ability to hold webconferences (both video and full-duplex audio) with dozens of participants sharing and viewing a myriad of document types.

Our competitors in the "collaborative" market only provide a fraction of our toolset. Being a company that arose from a collaborative professional background, we had the need for this toolset, as well as the insight to produce it. Our intimate knowledge of the collaborative arena is the driving force behind our future development and growth. We have created a way to utilize the Internet as the tool it was meant to be.

WHO NEEDS VIRTUAL-WORKSPACES AND WHY

Our customers are people who depend on fostering the creative process in their businesses. We provide 24/7 access to and use of a wide variety of high-speed, highly efficient creative and management tools for improved production, project scheduling and communications. Through webconferencing and data sharing, Virtual-WorkSpaces™ is a cost-effective way to reduce travel costs, streamline the design and approval processes, and shorten the manufacturing cycle. The road-weary creative people involved in design and implementation are fresher and more productive. The customers create and produce their products in a shorter time. Everybody wins.

We have identified several market segments that we intend to serve:

Architects, Engineering and Manufacturing	This group includes architects, drafting firms, engineering firms (mechanical and civil) as well as manufacturers and construction firms.
Education	This includes traditional four-year and two-year colleges and universities as well as on-line schools, technical and alternative teaching institutions.
Creatives	Advertising agencies, designers, media creatives, audio and video production facilities, animators, musicians, and so on.
Technical	Software development companies, computer-related hardware manufacturing companies, software engineers.
Government	Specific solutions to meet governmental and military needs and requirements.
Executive	Virtual Private Networks (VPNs) to provide high-level collaboration for executives, increasing the quality of communications and decreasing the need for travel.

SYSTEM REQUIREMENTS

Following are the recommended and minimum system requirements:

The recommended configuration is:

- Intel® Pentium® III processor (or better)
- 800MHz or higher
- 256MB RAM
- USB-based camera
- Internet connection of 256Kbps or higher
- Windows XP

A more powerful processor and higher processor speeds will improve performance. Additional memory may improve performance (depending on what applications are running). More Internet bandwidth is always better. Cable-modem will work, but because of the unpredictable upload speeds the performance might be sluggish and intermittent, especially if you are sharing files.

The minimum system requirements are:

- Intel® Pentium® III processor
- 600MHz or higher
- 256MB RAM
- USB-based camera
- Internet connection of 256Kbps or higher
- Windows2000 with multicast HotFix Q226124_W2k_SP3_x86_en.

IT SUPPORT NEEDS FOR VIRTUAL-WORKSPACES

After initial setup, configuration, and starting the VPN client, using Virtual-WorkSpaces is simply connecting to the Internet and logging in at the http://workspaces.virtualdesign.net website. Local IT involvement is no more complex than regular Internet maintenance and support.

VIRTUAL-WORKSPACES FEATURES & BENEFITS

The following tools appear on the VirtualDesign Network website:

Virtual-WorkSpaces | This is where you start your day. You can see your appointment calendar, today's conferences, your tasks, email, messages, and all your projects at a glance.

Calendar | The Calendar function allows you to initiate and schedule meetings and conferences. You can set global, personal or project calendars, depending on your needs.

Contacts | The Contact selection opens your Virtual Workspace address book.

Files | From the Files data island, you can begin and host a file conference that enables several people to work together, in real time, on simple or complex documents or drawings (see *Viewer* in the Virtual-WorkSpaces online Help).

Conferences | The Conferences section displays all of the webconferences that you have scheduled or to which you have been invited. Information is included about conference content and a list of participants.

Discussion | Multi-threaded discussion forums can be stored in the Discussion section, while conferences are in session. Discussions can also be continued later. This ability to track conversation *threads* provides a detailed audit trail for potentially innovative ideas, problem resolution, or "best practices" sharing.

Viewer | The Viewer is a Java-based application that allows you to open and view relevant documents from your local browser, without the need for the original application that created them. Nearly all design formats are supported. For a complete list, follow this link: http://www.virtualdesign.net/supportedFileFormats.asp

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INSTALLATION & SETUP

Being able to remotely log into Virtual-WorkSpaces™ and securely participate in a webconference involves downloading and installing a small communications package that includes the VirtualDesign Network Virtual Private Network (VPN) software. This is accomplished from the VirtualDesign Network website when you have been given a trial username and password. When you go to the website (http://workspaces.virtualdesign.net) and log in, you are presented with an Install Check page that informs you about the status of software you will need to successfully utilize the features of Virtual-WorkSpaces. From there, the installation process is accomplished by following the directions that the wizard sequence provides. After the download and installation of the VPN client is complete, a system reboot is required. Appendix A of this guide offers a step-by-step procedure for downloading and installing the VPN communication package.

To participate in a webconference you are required to run the file called vdnInstall.exe, which walks you through the installation and configuration of the VPN client. In order to operate the File Viewer with full functionality, you will need to download the Java Runtime software. In order to log in successfully, however, the only required download is the VPN package. You will have the opportunity to download the necessary files for the Viewer when you first use that functionality.

In addition to a USB camera, a headset with a microphone improves audio performance by attenuating background noise. Be sure to use the volume control in the Control Panel of your PC to get the levels set correctly and mute the PC-side microphone and speakers to avoid a feedback loop. If you don't have a headset, the embedded PC microphone and speakers will work fine if background noise is kept to a minimum.

EVALUATING VIRTUAL-WORKSPACES

You cannot truly evaluate Virtual-WorkSpaces by yourself. Some of the functionality, like the Calendar, Bookmarks, Contacts, Personal and Work Tasks, and Jobs can be navigated solo, but the heart of the matter requires more than one person. This is the driving reason we created Virtual-WorkSpaces. It is a collaborative toolset (see "Two Week Free Trial" later in this document).

Key to understanding how to use Virtual-WorkSpaces is the notion of The Project. All conferences (both video and file), discussions and calendars, are tied to a Virtual-WorkSpaces Project. For example, to create a webconference, you must be within a project. If you create your own project and attempt to create a conference, you must invite at least one person to join the project under which you want to create a conference. If you use the 'Now' feature when creating a conference and have not invited anyone to join the parent project, the conference will not be created.

For example, to create a conference you must accomplish the following:

- Successfully log in to Virtual-WorkSpaces
- Create a project
- Invite members
- Create the conference (details in Help)

One of the primary areas for evaluation is the sign-up process involving logging in and downloading the necessary software. Following that, of course, is using the VPN tunnel through which you connect to Virtual-WorkSpaces™. After that is accomplished, walking through the features list, general browsing and familiarization is recommended. As part of acclimating yourself to your WorkSpace, the online Help system is a valuable tool. It contains accurate information about the WorkSpaces, the icons, data islands, the processes and so on.

At first, you will need to create a project and invite at least one other user. Again, the online Help will explain how to do this. Then, you can create a conference, with one or more colleagues, use the chat, whiteboard, and desktop-sharing features. Once you are logged in, use the Navigation Tree (shown below) to move freely throughout Virtual-WorkSpaces.
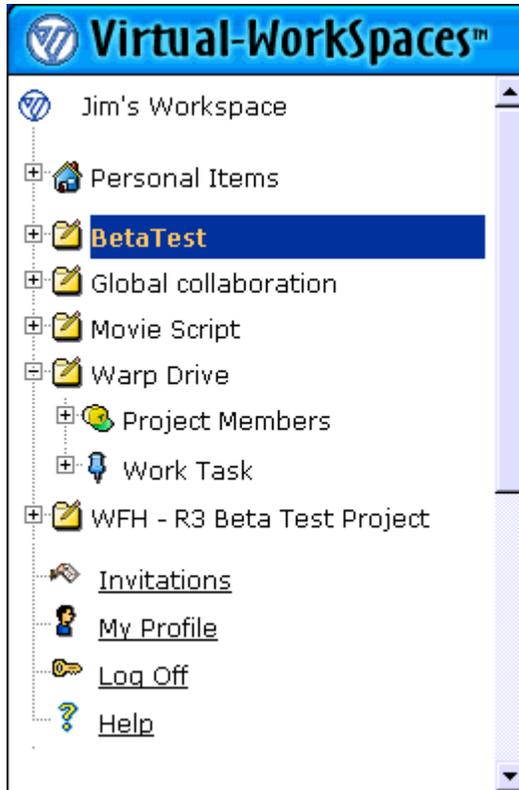
Expand the tree exactly as you would any Windows® hierarchy. When it is expanded, click on the desired project to select it. Then, right-click to activate the drop-down menu. 'Invitations' contains links to accept or decline invitations to projects created by others.

Before you join or create a webconference, read the following topics in the online Help:

- First-Time Webconference Download
- Join an Ongoing Webconference

While you have a webconference underway, use the directions in the Help to create a file conference and to access the Viewer. With your colleagues, look at a file, turn the markup layer on and off. Create markup. When you run both conferences simultaneously, sharing ideas and data, you are using Virtual-WorkSpaces as it is meant to be used.

The Files topic in the Help covers how to create a file conference, invite attendees, and has links to information about the Viewer. Make use of the Help as you learn about sharing and viewing files from any number of locations around the planet. You can also use the Viewer without creating or joining a file conference simply by selecting the 'View Only' option. When you do this you cannot create markup, but can view any markup that was created from within the last conference involving the file.

TROUBLE SHOOTING & TECHNICAL SUPPORT

If you encounter a problem that you cannot intuitively resolve, call *(USA) 503-224-7502*, or send email to support@virtualdesign.net.

TWO-WEEK FREE TRIAL

VirtualDesign Network's free, two-week trial link is available on the company's Web site at http://www.VirtualDesign Network. The service can be activated at any time by up to six people in any given organization. Organizations interested in testing more than six trial seats should contact VirtualDesign Network's sales office at (800) 552-4221.

COMING ENHANCEMENTS

Development of Virtual-WorkSpaces™ is ongoing. Coming enhancements include, but are not limited to, the following.

- Calendar functionality (recurring events, import/export to MS-Outlook, multiple 'views')
- Contacts functionality (import/export to MS-Outlook)
- Instant messaging
- … and more coming, largely based on clients telling us what they want

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SUMMARY

An evaluation of Virtual-WorkSpaces cannot be accomplished by a single human being. It requires a team of people who have the ability to collaborate, in real time, on the Internet. Virtual-WorkSpaces is not intended to be a "killer app," its purpose is to facilitate a community of people communicating and collaborating with one another in their work.

APPENDIX A:
PROCEDURE FOR INSTALLING
THE VIRTUALDESIGN NETWORK
VPN SOFTWARE CLIENT

Note: *The preferred client is Windows® XP. While Windows® 2000 operates, multimedia video frame-rate performance is not as robust and installation of a multicast protocol patch is also required. When you have completed installing the VPN Client, a reboot of your system is required. Make sure you have no applications running where data might be lost.*

Support can be reached via email at support@virtualdesign.net, or by calling 503-224-7502.

BEFORE YOU BEGIN

Before you start the installation process, please be aware of the recommended and minimum system requirements that are published in the letter that accompanies this installation package and, also, the following items:

Currently Supported Browsers:

Internet Explorer v5.5 with the w2k multicast HotFix Q226124_W2k_SP3_x86_en. (Windows 2000 Only) or (the preferred browser) Internet Explorer v6.

Firewall considerations:

UDP ports 500 and 2233 must be open for Send and Receive. Some installations may also require UDP port 50 to be open. These ports must be open in the intranet, for Send and Receive, at all router points between your workstation and the public internet.

DOWNLOADING AND INSTALLING THE VPN CLIENT

This procedure will lead you through the steps to successfully download and install the VPN Client. The first step is to open your browser, use your provided username and password and log into workspaces.virtualdesign.net. The following graphic shows the sign-in screen.

1. Fill it out appropriately and click on 'Update My Information.'

Alert: *The following screen example may be different from the one you see. For details, please contact the VirtualDesign Network Sales Team at 503.224.7496 (sales@virtualdesign.net).*

2. During your initial login, you need not be concerned with all the fields shown in the graphic. You can always edit them later. For details, look at the 'Edit My Profile' topic of the Virtual-WorkSpaces Online Help.

3. A window containing the End-User License Agreement (EULA) appears. Scroll to the end and click appropriately. Obviously, the process terminates if you do not click 'I Agree.'

4. Next, a window containing the Non-Disclosure Agreement (NDA) appears. As you did with the EULA, scroll to the end and click appropriately. The process terminates if you do not click 'I Agree.'

5. When you have accepted both the EULA and NDA, a screen that says "Determining System Configuration appears, after which the Installation Checklist appears:

Alert: *The following screen example may be different from the one you see. For details, please contact the VirtualDesign Network Sales Team at 503.224.7496 (sales@virtualdesign.net).*

6. Click on vdnInstall.exe.

    The Java Runtime downloads are optional and can be downloaded now, before the VPN download, or you can get them later from within Virtual-WorkSpaces. Windows®2000 systems will also see a download link for the necessary patch mentioned earlier in this document under "Currently Supported Browsers." When all items shown have been downloaded, the red "lights" on the 'Install Check List' will become green. Keep this on the radar, right now it is up in the air.

7. A File Download dialog box appears:
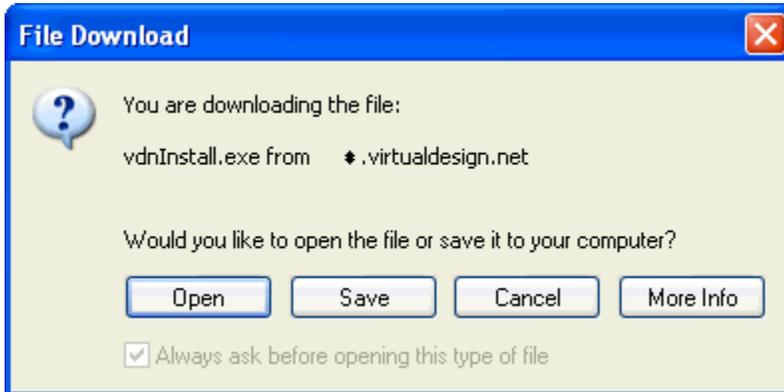
    Click 'Open.'

8. Read the warning about closing all other programs and click 'Next.'

Alert: *Remember, this process will require a reboot of your system. Any unsaved data in open applications may be lost if you do not close them.*

9. The installation wizard opens with the Welcome screen:

Click 'Next.'

10. The Software License Agreement screen appears:

Read the agreement. To continue, Click 'Yes.'

11. The Choose Destination screen appears:
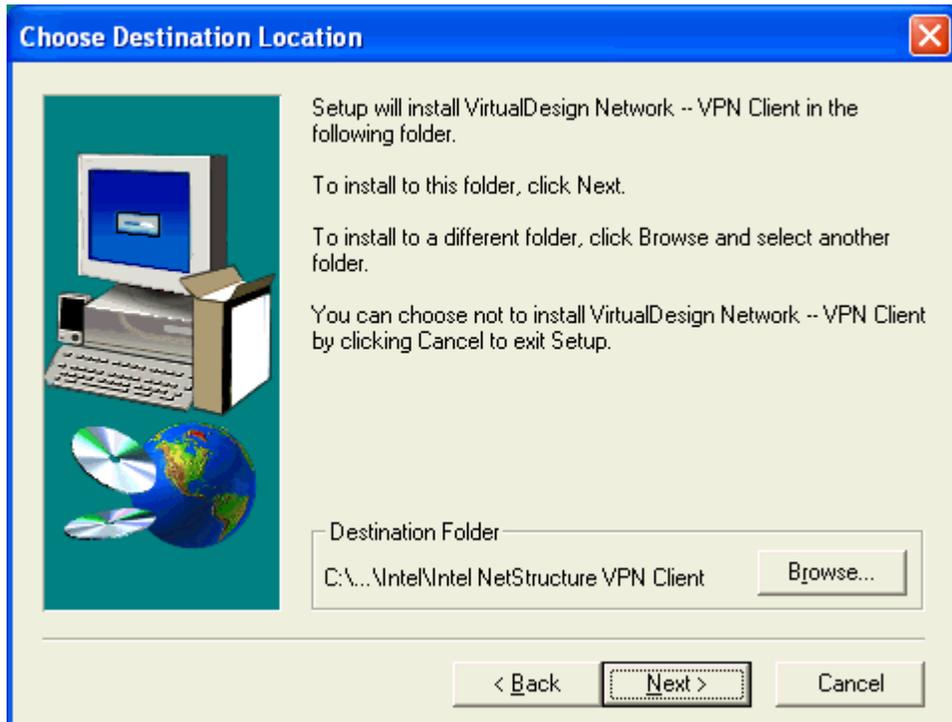
Click 'Next.'

12. The next installation wizard screen asks for the program folder and location:

Click 'Next.'

The installation of files begins. You will be queried regarding the Hardware Installation and the "Logo Test," as shown below:

Choose 'Continue Anyway.'

This occurs for any hardware in your system that has not passed the Microsoft "Logo Test." Click 'Choose Anyway' for all.

13. Next, you are asked if you want a shortcut for the VPN Client program on your desktop:
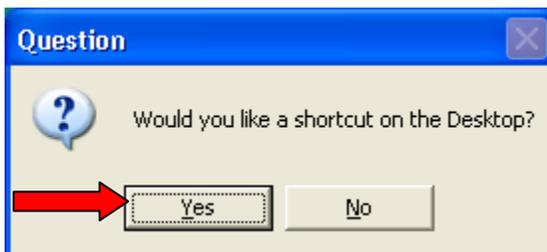
Choose Yes.

14. You are queried about a Reboot.

Click OK.

If you left applications running when back when you began the installation process, the following dialog may appear:

15. Click 'End Now.' The process continues and your computer reboots.

This completes the VPN Client installation. Now you can open your browser and log into Virtual-WorkSpaces.