

# FORTEERRA

## SYSTEMS INC

### **RemoteOperations™: Protect your Employees and Business**

#### **The Problem**

Organizations today are facing a full-blown flu pandemic due to the widespread outbreak of influenza caused by the H1N1 (Swine Flu) virus that has reportedly caused over 1000 deaths in the US so far this year. According to the Centers for Disease Control, the "Influenza is thought to spread mainly person-to-person through coughing or sneezing of infected people." When the H1N1 virus touches your organization, the first reaction of employees will be to strongly discourage those that have been or may be infected by the virus from coming to the office. Schools are taking the position that when children exhibit any flu-like symptoms they should stay home rather than risk potential exposures which cause additional stress on the workforce. With resources already razor-thin due to tough economic conditions, how many more employees can an organization afford to be without before operations are seriously affected?

Imagine you are a program manager; you feel the onset of what might be flu but are in the middle of several critical projects with deadlines. Two of your employees are already at home taking care of children that have the flu. Then, you have to send a key administrator home because he was clearly experiencing symptoms. What do you do now? How can you hold your project together while preventing further the spread of this virus? If your organization has not already faced this or a similar scenario, it will. And one management response will be to forbid employees from coming to the office.

Forterra Systems, a leader in private virtual world technology, is offering RemoteOperations™, a collaboration and communication solution to help overcome these obstacles and ensure organizations can continue to function at high levels despite the current challenges. Based on distributed, on-line 3D internet technology, RemoteOperations allows participants to work from remote locations just as they would in person.

#### **The Solution**

RemoteOperations is a revolutionary IT solution from Forterra Systems that provides an on-line collaboration environment for organizations that need employees and their constituents to effectively and productively work from remote locations. RemoteOperations is specifically designed to support the continuity of business operations for organizations addressing the H1N1 flu outbreak, where employees and their external constituencies have or are at risk of contracting the virus. RemoteOperations provides a way for users to effectively connect and maintain productivity without travelling or physically meeting, or even going to a regular office location. Using existing compute and networking technologies found in most businesses, academic or government organizations, RemoteOperations allows users to use a PC to log into a secure virtual environment where they are represented as a fully-animated avatar (3D character controlled by a user) similar to those shown in the images below:



Through this avatar-based computer interface, users are able to perform a broad range of communication and collaboration tasks in an immersive, three-dimensional environment that maintains the sense of actually being together. They can share and present a variety of media and documents to other participants with just a few clicks of a mouse. The avatars breathe, move naturally, and perform a broad range of hand and body gestures — just as people do in the real world — which creates a more natural and compelling environment for the participants. The results of all interactions are visible and audible to all participants logged into the environment.

Avatars can easily be customized to look exactly like the real users **instantly creating recognition and trust bonds between users in the virtual setting**. Users are able to talk with each other naturally through the use of integrated voice technology using a headset. A telephone feature is available so that remote users without PCs or internet access can still call into the virtual environment and communicate with in-world users. A session record-and-replay capability is available that collects all actions and communications performed by the users and allows full playback of meetings for review, analysis, debrief and compliance — and to support those that might not have been available at the time the meeting took place. Best of all, the solution can be expanded to support communication and collaboration between a practically unlimited number of users and physical locations — all each user needs is a computer and internet connection.

Available as a custom installation within an organization's existing IT infrastructure, as an external hosted offering or via Software-as-a-Service, RemoteOperations can be rapidly deployed on a small scale as a risk-reduction pilot, or across a large-scale organization that is already facing serious losses in productivity due to the inability of employees to come to their offices. The hosted and Software-as-a-Service versions are designed to minimize impact on existing IT organizations. Custom installations can be configured to operate strictly within an enterprise's existing VPN infrastructure to maximize security, or alternatively set up over the open internet to enable contractors, customers and business partners to interact with employees. All of Forterra's solutions can start small and scale to cover the full enterprise, as required.

## Features

RemoteOperations provides a rich feature set to address the immediate needs of organizations facing lost productivity because employees cannot work in the office. Based on the proven On-Line Interactive Virtual Environment (OLIVE™) virtual world platform, the solution provides a means to conduct meetings, events, training, project management sessions, and conferences from remote locations. RemoteOperations is offered with generic business settings such as meeting rooms in the virtual world, and a baseline set of features that can both be customized and enhanced as needed. The following describes the features included in the baseline and those that can be customized to enhance usability.

### ***Engaging Immersive Experience — Geared to Business Users***

The combination of life-like environments, high quality 3D audio and the industry's most human-like avatars deliver an unparalleled engaging experience. Realistic scenes and interactions create the experience of a face-to-face meeting with colleagues even though they are physically separated.

### ***Powerful Presentation Environment***

RemoteOperations enables users to make media rich presentations in-world for others to experience. Users can project rich media on the virtual screen, including PowerPoint slides and streaming videos through a simple drag-and-drop interface. In-world screens also support the shared display of desktop applications such as web-based programs, PDFs, Excel and Word documents: any application that can run on a standard PC can be shared with remote users in the virtual environment without the need to make any changes to the application. Useful presentation accessories include laser pointers, a zoom in/out feature, and a virtual teleprompter, all of which help presenters direct a meeting and focus participants on topics of importance. Objects in the virtual rooms can be linked to corporate information resources, intranet web sites, and external information as needed, providing an intuitive bridge between in-world meetings and web and e-learning content.

### ***Expanded Access***

Access to a PC and the internet is not always possible — so Forterra has added a way to expand access to the virtual environment by providing a way for users with standard telephones to call in and participate (using voice only) with in-world participants. The telephony feature enables users without a PC to use any type of phone system, including mobile, PBX, and soft phones, to call into or be called from an in-world participant or speaker phone. This feature also enables in-world users to make outbound calls or receive inbound calls from anywhere in the world.

## **Personalized Avatars**

Often described as increasing the confidence and trust between virtual world participants, RemoteOperations supports the customization of avatars to create a personalized in-world persona that closely resembles the participant.



## **Meeting Scheduling through Native Calendaring Systems**

Schedule a virtual meeting using MS Outlook, Lotus Notes®, Google Calendar, other iCal-compatible systems and desired dates, times and attendees using your existing calendaring system as you normally would, but now select from available RemoteOperations resources that include room types and options such as tables, chairs, podiums, and number of screens to complete your meeting invitation. The meeting invitation and acceptance process uses the recipient's native email and calendaring system by placing an embedded link in the invitation that launches the virtual environment at the designated time.

## **Easy to Learn and Use**

An orientation area enables new users to get comfortable communicating and navigating in minutes. Users learn RemoteOperations quickly, thanks to its intuitive, graphical user interface. Power users, including moderators or instructors, can have access to advanced and role-specific controls.

## **Privacy and Security**

RemoteOperations can provide complete privacy and security for your organization's remote collaboration needs and offers the peace of mind that no unauthorized personnel will visit, hear or see what is being presented, shared or discussed. Supporting operation behind a corporate firewall, running on your own servers, with user authentication, and/or encryption between the server and clients, a variety of security levels can be achieved depending on your requirements and existing infrastructure.

## **Persistence**

RemoteOperations supports the concept of persistence. So, changes that occur in-world stay that way until they are changed by other participants or administrators. This is an important feature for group collaboration particularly with asynchronous communication. Participants can enter the environment and present content that can be seen later by others — even if the original presenter is no longer logged into the system.

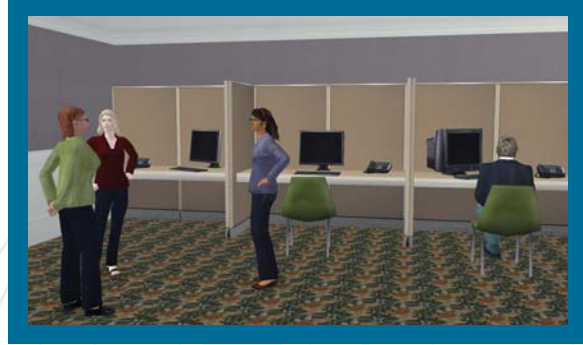
## **Benefits**

RemoteOperations provides the following benefits:

- **Stay Connected and Productive** — Users can work from home or any other location and remain connected to the rest of the organization or external parties as if they were physically co-located, enabling them to stay productive.
- **Rapidly Deployable** — RemoteOperations is usable “out-of-the-box” with all essential functionality and a wide array of practical 3D content included. RemoteOperations is a client-server software solution that uses standard PCs and servers, and runs on LANs, WANs or the internet — no special interface technology or video equipment is needed. Depending on the deployment strategy, users may simply download and install the application over the internet and establish an account — typically without the need to interact with outside personnel — or the solution can be pushed to an organization through a corporation's IT staff.
- **Reliable and Secure** — Whether hosted by your IT organization or a third-party of your choice, the solution provides a private, secure environment where you can be assured that your data and communications are fully protected. A range of authentication systems are available to ensure that users on the network are who they report to be. Integration with corporate LDAP systems can be used to rapidly set up accounts and to ensure user authentication.
- **Scalable** — Forterra's solution can start small with a basic pilot installation for a small number of users and can be rapidly scaled to support full enterprise operations as needed. By increasing the size of the server infrastructure using commodity hardware and adding bandwidth, additional users, groups, and departments can be brought on-line until the entire enterprise is enabled.

## Benefits (cont'd)

- **Expandable Outside Your Organization** — The solution can be configured to operate only within your organization for enhanced security, or can provide access to outside users who are essential to business operations. The ability to bring your employees and your entire business ecosystem together in a familiar setting where they can collaborate as they would in the real world is critical to support continuity of operations.
- **Reduce Risk** — In these uncertain times where the H1N1 virus has the potential to cripple your business, this solution offers a simple and effective way to maintain continuity of operations by allowing employees to work remotely.



*Working and Connecting In-world*

## Comparison with Other Collaboration Solutions

Many organizations today use a variety of meeting and collaboration technologies, such as audio conferencing, web-conferencing and telepresence. These technologies, however, do not offer a realistic, immersive, environment that helps participants feel connected, and each technology has significant limitations relative to the demands of maintaining ongoing business operations. Frequently, there are also hidden costs. The following table highlights and contrasts the features and benefits of each solution:

|                                       | Audio Conferencing              | Web Conferencing   | Telepresence                                      | RemoteOperations   |
|---------------------------------------|---------------------------------|--|---|--|
| <b>Benefits</b>                       | Familiar                        | Familiar   | Partial Face-to-face                              | Most believable sense of shared presence                             |
|                                       | Ubiquitous                      | Ubiquitous   | Communicates body language and facial expressions | Full Multi-media sharing; unlimited number of simultaneous documents |
|                                       | Perceived as inexpensive        | Perceived as inexpensive                                   | Limited Multi-Media                               | Appeals to internet generation                                       |
| <b>Challenges</b>                     | Poor participant attention span | Voice is extra charge                                      | Requires special equipment or installed sites     | Requires download and software install                               |
|                                       | No sharing of media             | Poor video solutions                                       | Does not work for remote employees                | Still novel to many organizations                                    |
|                                       | Discussion context              | Oriented more towards one-to-many than group collaboration | Requires significant bandwidth                    |  |
|                                       |                                 | Limited to one shared document at a time                   | Poor document sharing abilities                   |  |
| <b>Costs</b><br>(per person per year) | \$500-\$1000                    | \$30-\$100   | \$1000s   | \$60-\$200   |

## Take the Next Step Now!

Get started today with RemoteOperations from Forterra Systems. For further information on RemoteOperations, Forterra Systems, or OLIVE, please consult [www.forterrainc.com](http://www.forterrainc.com), send an inquiry to [www.forterrainc.com/contact-us](http://www.forterrainc.com/contact-us), or call Chris Badger at 650-433-4002.

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