

# A Collaboration Portal for US Joint Forces Command that Supports Humanitarian Assistance and Disaster Relief

## Company Profile

The mission of the Standing Joint Force Headquarters (SJFHQ) is to provide the warfighter with a trained, standing core element to enable the joint task force commander to command and control joint and multinational assigned forces.

U.S. Joint Forces Command (USJFCOM) developed and tested a conceptual model and created standards and certification criteria for deployable SJFHQ core elements (SJFHQ-CE) at combatant commands. The command rigorously tested and refined the conceptual model through a series of major experiments and exercises. As a result, the Secretary of Defense directed combatant commanders establish SJFHQ core elements by 2005.

## Business Situation

The US Joint Forces Command (USJFCOM) is tasked with developing and maintaining an online collaborative solution that will allow organizations both within and external to the Department of Defense (DoD) to collaborate on solutions to assist with disaster relief efforts throughout the world. This solution needs to be available through the most popular web browsers and require little to no external application downloads. It must allow for many different organizations to determine the needs for the disaster, track what assets are available, match the needs with the assets, and determine transportation needs. By delivering content to multiple organizations, HARMONIEWeb will allow for faster and better communication amongst those agencies which will provide better and faster relief efforts. USJFCOM wanted an out of the box collaborative platform that will allow for customization to assist with these efforts.

## Technical Situation

USJFCOM developed a pilot solution utilizing both static HTML web pages and a portal solution based on Microsoft SharePoint Portal Server 2003.

MicroLink provided USJFCOM with an assessment of the current HARMONIEWeb capabilities with a proposed path for future direction for the project. The assessment provided the following observations.

- Single point of failure. Solution lacks redundancy in case of a hardware or software failure.
- Limited network bandwidth with no ability to scale up to meet the increased requirements during a disaster relief effort.
- Inconsistent user interface look and feel.
- Manual account creation process.
- Lacks the capabilities required to support a disaster or humanitarian relief effort.

Utilizing MicroLink's industry knowledge in combination with industry best practices USJFCOM was presented with a collaborative solution that tightly integrates the best of breed technologies available to the relief worker within a tightly integrated presentation tier.

## Solution

USJFCOM SJFHQ CIE Management Office engaged MicroLink to deliver a "collaboration portal" to meet the HARMONIEWeb capability requirements for disaster and humanitarian relief efforts. This collaboration portal is required to deliver the following capabilities.

- Public website that enables potential members to register for the HARMONIEWeb "private" portal.
- Private portal that delivers collaboration features like email, blogs, calendars, contacts, discussion boards, document libraries, links, picture libraries, tasks, and wiki.



- Event sites or work spaces that can be used by disaster and humanitarian relief workers to collaborate on an event.
- Instant messenger or chat capability that provides conversation persistence.
- Conferencing or briefing capability that includes video, voice, document sharing, application sharing, desktop sharing, and whiteboard.
- Mapping features with the ability to pinpoint areas of interest.
- Single sign-on for HARMONIEWeb and all associated tools.
- Hosting solution that provides 24x7 support and can readily scale up as the event dictates.

MicroLink recommended the COTS products Microsoft Office SharePoint Server 2007 (SharePoint), Live Communication Server 2003 (LCS), Microsoft Exchange Server 2007 (Exchange), Microsoft Virtual Earth and Adobe Connect to meet the initial capability requirements while providing a strong foundation for future growth and enhancements.

MicroLink implemented the HARMONIEWeb public web site using SharePoint. This web site serves as the front end to the HARMONIEWeb private portal and has a custom registration process using proprietary MicroLink software that automates the account provisioning process saving hundreds of staff hours.

SharePoint also serves as the foundation of the HARMONIEWeb private portal. MicroLink built out the private portal leveraging SharePoint's rich "out of the box" collaboration features but also added key custom web parts to meet requirements not covered by SharePoint. In addition to offering standard features like discussion boards, blogs, and wiki MicroLink worked with USJFCOM to develop an event site template that offers features that a disaster relief team would need to collaborate more effectively during a disaster. These features include both standard SharePoint web parts like the calendar, document libraries, and announcements but also custom built web parts by MicroLink that integrate LCS and Adobe Connect.



Figure 1 - HARMONIEWeb Public Web Site

In order to meet USJFCOM's capability requirements MicroLink had to integrate several applications into a single HARMONIEWeb solution but needed to make this integration seamless to HARMONIEWeb members. Consequently, MicroLink implemented Microsoft ISA Server 2007 (ISA) so that the HARMONIEWeb member would log onto the private portal once and those login credentials would be passed to the other applications thus eliminating the need for multiple sign-ons and reducing a significant barrier to portal usability. The ISA server coupled with other MicroLink custom code ensures flawless interoperability with LCS, Exchange, and Adobe Connect.

MicroLink implemented the LCS Web Communicator in order to meet USJFCOM's chat requirements. This provides a robust instant messenger capability with no downloads required by the HARMONIEWeb member. Further, MicroLink integrated the LCS Web Communicator presence and awareness information with SharePoint via MicroLink User Presence. User Presence is not currently an "out of the box" SharePoint capability. MicroLink User Presence provides the HARMONIEWeb member with the ability to see a members onsite status while navigating any site in the portal.

To provide a more robust communication platform for disaster relief teams USJFCOM developed a comprehensive set of requirements surrounding the conferencing and briefing areas. MicroLink met those requirements by selecting Adobe Connect and integrating it into the HARMONIEWeb solution. But in order to further enhance the user experience MicroLink developed a series of SharePoint web parts to make the use of Adobe Connect even simpler. For example, MicroLink developed a web part that displays the Adobe Connect meetings a user is a part and a link to join the meeting. MicroLink also developed a web part that displays what meetings are active, who is the host of the meeting, what members are participating, and how long the meeting has been in session.

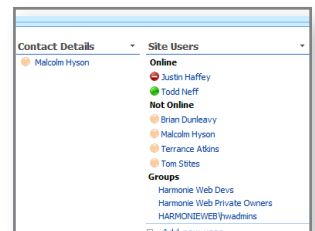


Figure 2 - MicroLink User Presence

In a disaster relief effort a key indicator of success is getting the right resources to the right people, at the right time, and in the right place. Consequently, MicroLink chose Virtual Earth to

be the mapping platform to meet this need. MicroLink also developed a preliminary web part that enables a user to enter a location on a Virtual Earth map with a right click. This creates a list item that provides the user with the ability to add additional information and even attach documents or pictures to the point.

Finally, MicroLink implemented a HARMONIEWeb Exchange server to provide select members with a HARMONIEWeb email address. This Exchange server is available via Outlook Web Access and many members use the “out of the box” SharePoint integration to display their email and appointments in their personal collaboration site (mysite).

## Benefits

The HARMONIEWeb “collaboration portal” solution MicroLink has provided USJFCOM SJFHQ has the following benefits:

- SharePoint portal solution that manages both the HARMONIEWeb public and private web sites using a common set of capabilities and features thus minimizing the portal management learning curve.
- SharePoint portal that provides a rich set of “out of the box” and MicroLink web parts specifically designed to meet the particular needs of a disaster relief site while retaining the ability to quickly mixed and matched those web parts for a custom site solution.
- Conferencing and Briefing capabilities provided by Adobe Connect that does not require downloads and includes application and desktop sharing, document viewing, file sharing, internet audio broadcasting, multipoint video conferencing, persistent chat, and whiteboarding and annotation tools.
- Single sign-on using ISA Server. Once a user logs onto the HARMONIEWeb private portal they do not have to sign in again to use LCS Web Communicator, Outlook Web Access, or Adobe Connect.
- Instant messenger solution via LCS Web Communicator that requires no downloads and provides SharePoint with up to date user presence information.
- Event site template designed to meet the collaboration needs of a disaster relief team but with the ability to be quickly and easily tailored.
- Hosted solution with high availability and 24x7 support.
- Scalable solution to meet the high volume needs during a disaster relief effort.
- Email capability using Microsoft Exchange.
- Mapping capability using Microsoft Virtual Earth.

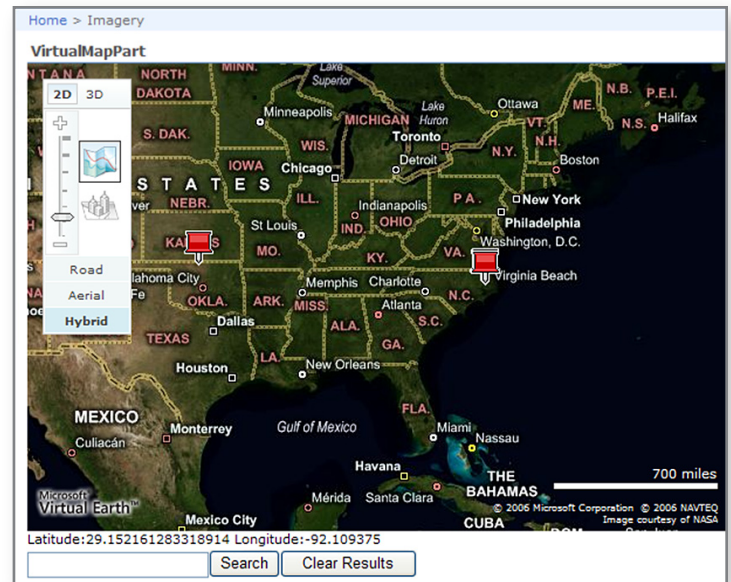


Figure 3 - MicroLink Virtual Earth Map Part

## Products and Services provided by MicroLink

The following products and services were provided by MicroLink to deliver the AWS Licensee “coordination portal”:

- Microsoft Office SharePoint Server (MOSS) 2007
- Microsoft Windows Server 2003
- Microsoft SQL Server 2005
- Microsoft ISA Server 2006
- Microsoft Exchange Server 2007

- Microsoft Live Communication Server 2003
- Microsoft Virtual Earth
- Adobe Connect
- Implementation services to architect, install, configure, and customize Microsoft Office SharePoint Server 2007 and Adobe Connect.
- Implementation services to extend MOSS 2007 by developing custom web parts.
- Implementation services to extend Adobe Connect by developing MOSS 2007 web parts that integrate with Adobe Connect.
- Hosting services to support the implementation of the HARMONIEWeb MOSS 2007 solution.
- Support and Help Desk services to sustain the HARMONIEWeb solution.

## For Further Information

For further information about **MicroLink** and our solutions please contact us at [solutions@microlinkllc.com](mailto:solutions@microlinkllc.com) or by phone at 703-556-4440 or visit us online at [www.microlinkllc.com](http://www.microlinkllc.com).

