



U.S. DEPARTMENT OF
STATE

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MEMORANDUM
UNCLASSIFIED

TO: MSO

FROM: IRM/BPC/eDIP - C. Christian

SUBJECT: ONE Usability Survey Results

CC: eDiplomacy

Summary

The OpenNet Everywhere (ONE) solution providing remote access to Department of State (DoS) resources is being made available for teleworkers in 2005. ONE provides access to email, calendar, and contacts through Outlook, to the Microsoft Suite, to files and folders through Windows Explorer, and to some other applications as required by users. Core services are through a Citrix server implementation. IRM conducted a technical test of ONE from February 28th through March 11th, and survey results were presented in a prior memo dated 18 March 2005. The usability testing scheduled for March 28th through April 15th is the subject of this document.

Approximately 100 teleworkers were involved in addition to technical testers/teleworkers who continue to use ONE. 84 responded to the survey. This represents slightly less than half the individuals with FOBs. Users were split between teleworkers and other IT professionals, some with responsibility for supporting customers. User testers had favorable responses to ONE during this period. ONE performed satisfactorily for testers with current configurations of browsers and Java on their personal machines and a few experienced difficulty with older versions of Java or browsers. The setup of the user profiles seemed to be the biggest initial hurdle encountered for teleworkers, and will require trained personnel for mass deployment of ONE. Most users accessed email (97%). Calendar (54%), the Microsoft Suite (73%), and OpenNet (58%) use was high, but lower than for technical users. 71% of testers accessed files and other applications and 80% browsed the internet from within ONE. Most testers used ONE with broadband connections from home, either a direct connection or through a home LAN connected to broadband, and a few used WiFi hotspots and dial-up modems.

Many users experienced periodic latency in the system and, again, as for prior testers, the latency qualification of “acceptable” or “unacceptable” was highly individual. Many users reported a need for printing and saving files locally and the preferred work around was to email to an alternate account, open that email with a browser on the desktop outside of ONE and save, print, or edit. Teleworkers noted a need for varied applications such as eForms, Visio, Dreamweaver, and IIP applications. Some administrators desire administration access to specific programs.

Detailed Survey Results and Feedback

Testers

Teleworkers were drawn from M, Med, DS, EAP, HR, OBO, AF and L Bureaus. Other testers from IRM participated including some of the previous technical testers. Test respondents self-categorized as teleworkers (40%), or in an IT field (directly supporting = 33% and not directly supporting users = 27%) responded to the survey.

Most users logged in 2-10 times (56%) and 38% logged into ONE more than 10 times, some due to difficulty in gaining access, some to check email at different times.

Configurations

The most common computer configuration was Windows XP with Internet Explorer version 6 and Sun Java version 1.4 or 1.5. Other successful configurations included Firefox/Mozilla, and Netscape. Other successful configurations were tested on Windows ME, Windows 98, Windows 2000, Windows NT, Virtual Windows 2000 (on a MAC), an iMAC and MAC OSX. A few users tried Safari on Mac Powerbooks.

Access attempts to ONE with configurations documented to be inoperative were, indeed, unsuccessful (access through OpenNet or configurations without Java). Some configurations indicated Java was operative (with the test application running in the metaframe) but the ONE applications would generate errors. In general problems were alleviated if the user downloaded a newer version of Java. As recommended from previous testing, regular users must be urged to download new browser and Java configurations for success. Secure IE did not work with ONE. Occasionally Firefox would close catastrophically with no warning. This did not occur with other Firefox applications.

Users who accessed ONE through hotel equipment often found that the lack of a current version of Java or an older browser prohibited use. Users on dial-up connections and (one or two) overseas connections found the latency prohibitive for work.

Applications and Functions Accessed

Nearly all teleworkers used Outlook email, and a majority accessed Outlook calendar, Outlook contacts, the Microsoft Suite and files in their workspace, although problems with mapped drives occurred for some. A few teleworkers tried Word and other applications from the desktop, but far fewer than the technical testers. Most attempts were satisfactory.

As for the technical testers, teleworkers reported problems with mapping drives and user profiles and recommended that new users be assisted through this process as they become ONE users. Applications that did not work were varied such as the Outlook personal folders (since the Citrix profile is different than the profile at DoS), Dreamweaver, Publisher, Access, GEMS, and eForms.

The print and save functions were the primary inaccessible utilities that users commented on (see below). This was mentioned for applications that require a print preview for report generation.

Access Methods

Most testers accessed ONE through broad-band connections. A few used dial-up (6%). A few did try WiFi hotspots and other locations such as hotels. Access from hotel business centers worked except for those locations that did not have Java installed on public machines.

Responsiveness

The login responsiveness was found to be adequate and depended on the individual person and a particular session. This was clarified by comments that the system sometimes exhibited latency and so the response was “adequate” but not “great”. Once logged in, users generally experienced latency, sometimes acceptable, sometimes prohibitive when typing or scrolling. Users tried logging out and back in, often improving responsiveness. Other users noted that putting applications in full screen mode seemed to alleviate latency to a certain extent, but led to other problems such as hidden windows and incomplete screen refresh.

Help Support

A quarter of the testers used help 1-2 times and a few more times. Individuals obtained help from system personnel or the MSO group. Few testers used manuals to troubleshoot problems.

Introductory Training

Testers easily understood how to use the FOB and login. Users suggested that the hands-on experience was much better than the video. One suggestion was to have the video play, but more slowly and allow users to follow along. Having system administrators on site at the training assisting with setup was reassuring and helpful.

Users still encountered problems with mapped drives and profiles when they began testing at home, so planning for active support while teleworkers get oriented and start using ONE would be beneficial. Many testers think that ONE is very easy to use (51% scored 1 out of 5 for ease of use), with most of the rest of the users giving ONE a score of 2 or 3, based on latency, mapping drives and the requirement to install Java on the host computer (may be disallowed in some environments like hotels or libraries).

Many testers did not look at the user guide, of those that did some were having problems that were not addressed (user profile issues). In general, some start ups were rocky, but most users eventually obtained the help they needed.

Printing and Downloading Files

52% of the testers required printing and those did emphasize that printing is part of their work. For those who attempted a work around, the usual method of emailing to a private account accessible from their home computer was used as a solution. Some users saved files and printed when they returned to the office, but still thought that printing was useful.

Fewer individuals wished to save files (34%), and of those that did or those who thought about it would use the private email solution (as for printing) to enable manipulation of files locally.

Additional Applications

Additional applications of use for teleworkers were noted as: Dreamweaver, Adobe Acrobat, Visio, Microsoft Project, eForms, OBOLink, Case Management Systems, Publisher or other graphics/imagery packages, GEMS, ILMS, TMS, Windows Media Player, Photoshop, PASS and a few others. Administrators want administrative functions and software enabled.

Other Comments

Users were generally pleased with ONE use and felt the program should be rolled out to the entire Department. Users acknowledged that latency issues and start-up configuration issues should be addressed and that system support personnel should know readily how to help remote users. Additional comments mirrored the assessment provided by the technical users.

The usability test was informative in demonstrating problems and solutions that will be encountered by teleworkers, and eventually remote users. The technical testers were able to identify most issues beforehand, however there were additional situations and configurations brought to light during the usability test that will help to improve ONE for mass deployment.