



# Enterprise Vault Whitepaper

## Mobile Integration

This document will cover options available for mobile device integration with Enterprise Vault

If you have any feedback or questions about this document please email them to [EV-TFE-Feedback@symantec.com](mailto:EV-TFE-Feedback@symantec.com) stating the document title.

This document applies to the following version(s) of Enterprise Vault:  
8,9 & 10

This document is provided for informational purposes only. All warranties relating to the information in this document, either express or implied, are disclaimed to the maximum extent allowed by law. The information in this document is subject to change without notice. Copyright © 2012 Symantec Corporation. All rights reserved. Symantec, the Symantec logo and Enterprise Vault are trademarks or registered trademarks of Symantec Corporation or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners

## Document Control

### Contributors

Who	Contribution
Evan Barrett	Author
CommonDesk	Content

### Revision History

Version	Date	Changes
1.0	February 2012	Initial publication

### Related Documents

Version	Date	Title

## Table of Contents

Introduction	1
Enterprise Vault Mobile Search	1
Accessing Mobile Search	1
Accessing Mobile Search from the Internet	2
Searching Vaults	2
CommonDesk	6
ARCviewer Overview	6
Basic Search	6
Advanced Search	7

Browse	8
View attachments and embedded links in archived messages	9
Retrieve archived items using “Send to Inbox”	9
Store in Vault	10
Supported Mobile Devices	11
ARCbridge and CommonDesk 360 Overview	11
ARCbridge	11
ARCbridge for Enterprise Deployments	12
CommonDesk 360	13
More Information	13

### **Appendices**

APPENDIX A – Enterprise Vault Mobile Search Prerequisites and Installation

APPENDIX B – Requirements for Running CommonDesk 360 and ARCbridge

## Introduction

The growth of mobile device usage by end users has grown dramatically over the past few years and will continue to do so in the future. Users are relying less on traditional client devices (such as a laptop or desktop) and organizations are facing a wide range of challenges when providing users access to archived items from smart phones (such as iPhone, Android-based, or BlackBerry) and tablet devices (such as iPad, Android-based, and Windows Mobile).

There are currently two solutions for mobile device support for Enterprise Vault, and these will both be covered in this document:

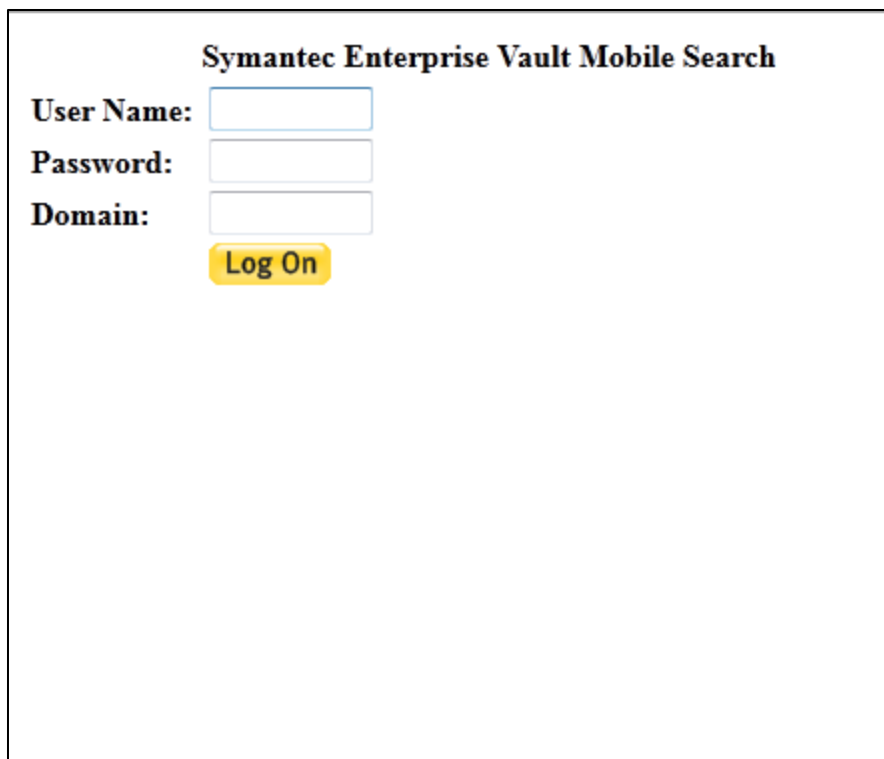
- Enterprise Vault Mobile Search provides a web-based search interface tailored specifically for mobile devices.
- A Symantec partner, CommonDesk, provides a solution with a feature set more similar to that of Enterprise Vault for Outlook, with browsing, searching, archiving, and “send to inbox” features.

## Enterprise Vault Mobile Search

Enterprise Vault Mobile Search provides a web-based interface that any mobile device with a web browser can access. An end-user will have access to all Exchange Mailbox archives to which the user has permission. More details on prerequisites and installation are detailed in Appendix A.

### Accessing Mobile Search

The default URL for Mobile Search is **[https://<mobile\\_search\\_server>/mobilesearch](https://<mobile_search_server>/mobilesearch)** where <mobile\_search\_server> is the name of the server hosting Mobile Search. The login screen will vary depending on the Authentication Scheme selected as shown in Figure 15. If “Use Logon Screen” was selected, the end user will be presented with a screen similar to that shown in Figure 1.



**Symantec Enterprise Vault Mobile Search**

**User Name:**

**Password:**

**Domain:**

**Log On**

**Figure 1 – Mobile Search Logon Screen**

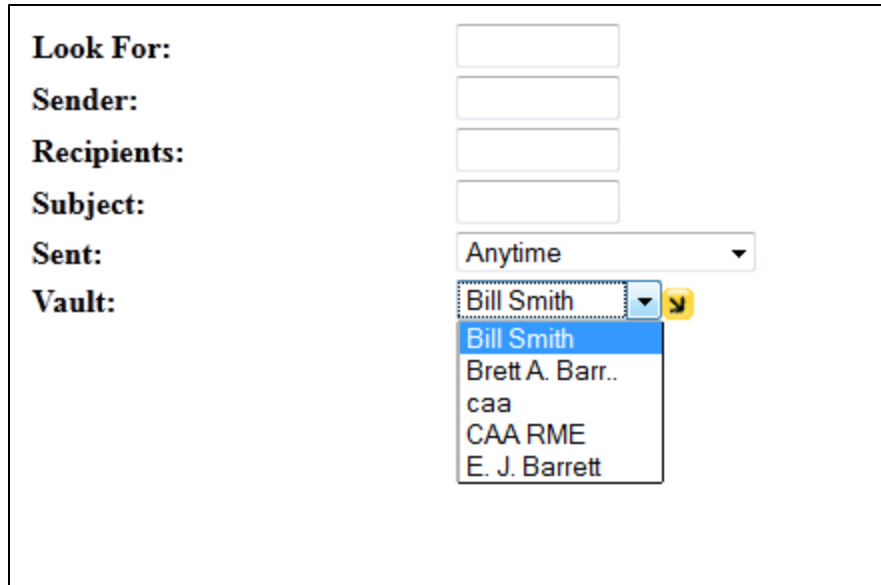
If “Use Basic Authentication” was selected during installation, a separate popup will appear asking for user credentials. The user should enter their login name using a domain\username format.

### **Accessing Mobile Search from the Internet**

In order for end users to be able to access the Mobile Search server from the Internet, the URL for server hosting Mobile Search must have its address configured in the public DNS space (such as evmobile.company.com). Additionally, a port must be opened on any firewall that would exist between the Internet and the EV Mobile Search server. By default, the HTTPS protocol uses port 443.

### **Searching Vaults**

Once a user has logged in, all available Exchange mailbox archives for which the user has access will be available for search. If the user has access to more than five archives, a black arrow in a yellow box will be shown (as seen in Figure 2). Note that, as with the Outlook client add-in, archives are referred to as “Vaults” in this interface.

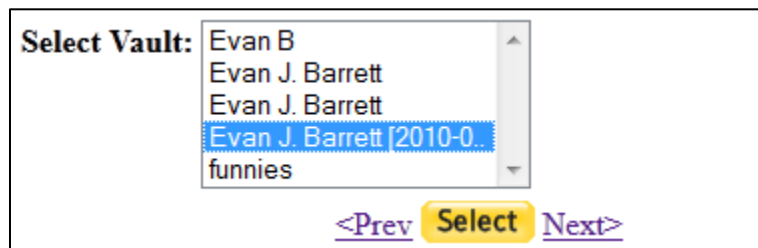


The screenshot shows a search interface with the following fields and options:

- Look For:** [Empty text box]
- Sender:** [Empty text box]
- Recipients:** [Empty text box]
- Subject:** [Empty text box]
- Sent:** [Anytime (dropdown menu)]
- Vault:** [Bill Smith (dropdown menu)]
  - Bill Smith
  - Brett A. Barr..
  - caa
  - CAA RME
  - E. J. Barrett

**Figure 2 – Home Search Page**

When the user clicks on the arrow, the user will be able to select an archive for search. Using the Prev and Next links, the user can page through all archives, and then select the one they want to search (as shown in Figure 3).



The screenshot shows the 'Select Vault' dropdown menu with the following options:

- Evan B
- Evan J. Barrett
- Evan J. Barrett
- Evan J. Barrett [2010-0...
- funnies

Below the list are navigation links: [<Prev](#) [Select](#) [Next>](#)

**Figure 3 - Selecting a Vault**

After the archive has been selected, the user may then enter in any additional search criteria such as keywords, sender name, receive name, subject, and sent timeframe. The user may then click on Search to begin the search. If there are more than 400 hits in the search, the user will be asked whether or not they wish to refine the search or display the first 400 hits.

Within a few seconds, search results will be returned (as shown in Figure 4). By default, items will be displayed from newest to oldest. The user can sort by newest to oldest, oldest to newest, sender (A-Z), sender (Z-A), subject (A-Z), or subject (Z-A) (as shown in Figure 5).

<b>Sort By:</b> Date (New to Old) ▾ →
<b>06/12/2011</b>
✉ jason chisler <a href="#">CICCI regional club info</a>
<b>03/12/2011</b>
✉ xfireobsessed@hotmail.. <a href="#">registering</a>
<b>11/11/2011</b>
✉ Google Alerts <a href="#">Google Alert - "Chrysler Cro..</a>
<b>07/11/2011</b>
✉ Crossfire Internat.. <a href="#">Topic reply: CICCI-FACEBOOK</a>
<b>04/11/2011</b>
✉ American Family <a href="#">Don't Let a Deer Put a Dent ..</a>
<b>02/11/2011</b>
✉ Parker Pediatrics <a href="#">News from Parker Pediatrics</a>
<b>28/10/2011</b>

Figure 4 - Search results

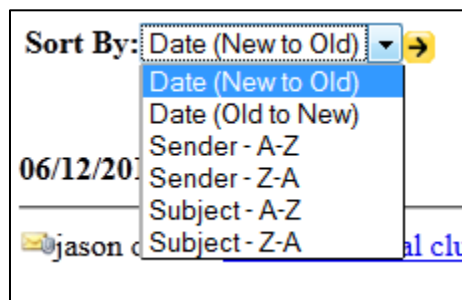
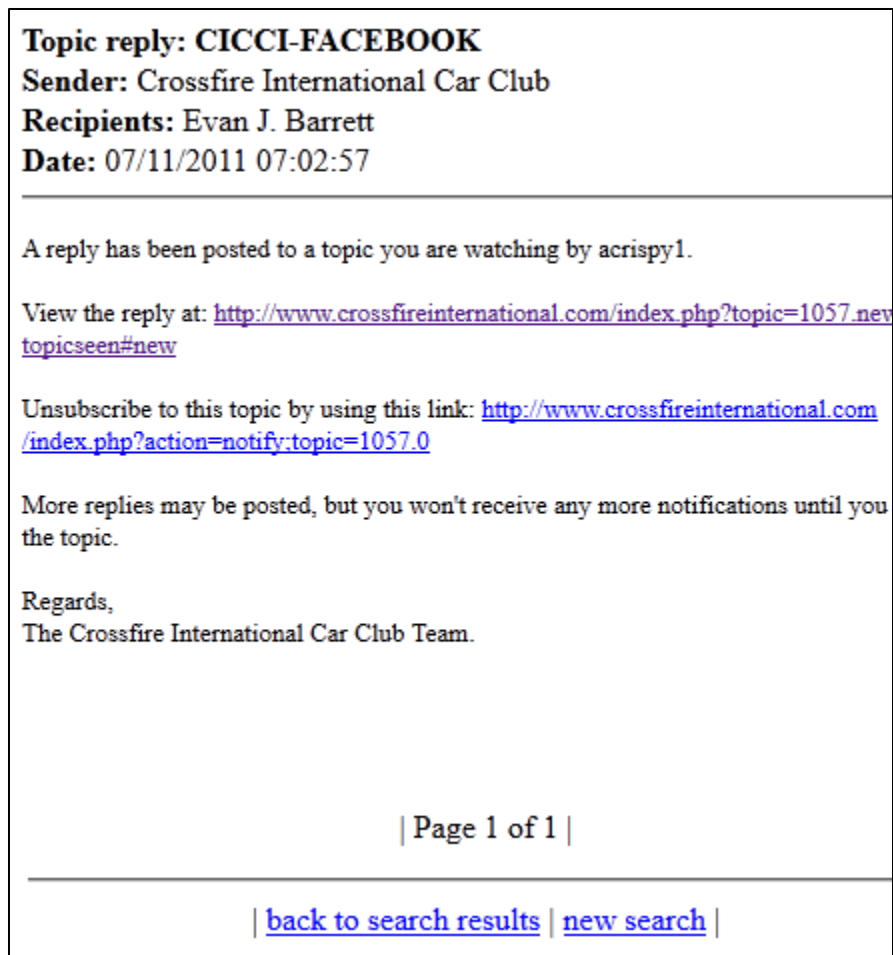


Figure 5 - Changing the Sort Order

To view an archived item, the user can simply click on the subject name of the message. The message will be rendered in HTML format (as shown in Figure 6). Any attachments that were part of the message are available as well and will be listed at the bottom of the message. The user can click on the link to the attachment and the attachment will be returned in HTML format (if available).



**Figure 6 - Viewing an Archived Message**

The user may then go back to search results or start a new search by clicking on the appropriate link at the bottom of the message.



## **CommonDesk**

### **ARCviewer Overview**

CommonDesk's ARCviewer product provides a comprehensive mobile solution for Enterprise Vault users. ARCviewer is a client-side app for BlackBerry and iOS that provides a similar feature set to that of Enterprise Vault for Outlook, including browsing, searching, archiving and "send to inbox." The ARCviewer app can be downloaded from iTunes or from Blackberry App World.

There are three components to the CommonDesk solution for mobile devices, ARCviewer, ARCbridge, and CommonDesk 360. These components will be discussed in more detail in this section. In addition to the information provided in this whitepaper, CommonDesk provides numerous videos for use in pre-sales, installation, and training of the ARCviewer system products.

The trial in these App stores will work against a dummy database. It is useful in pre-sales situations in order to become familiar with ARCviewer's product features. A pilot can be also installed for up to 30 days, at no cost, to work in a production environment.

Features of ARCviewer include:

### **Basic Search**

ARCviewer allows mobile users to search their vault by keyword. Pull up the search dialog from anywhere in ARCviewer, and a search bar will appear in which you can type a keyword against which to search your archives. A list of search results will appear. To access an item, click on the subject of the email.

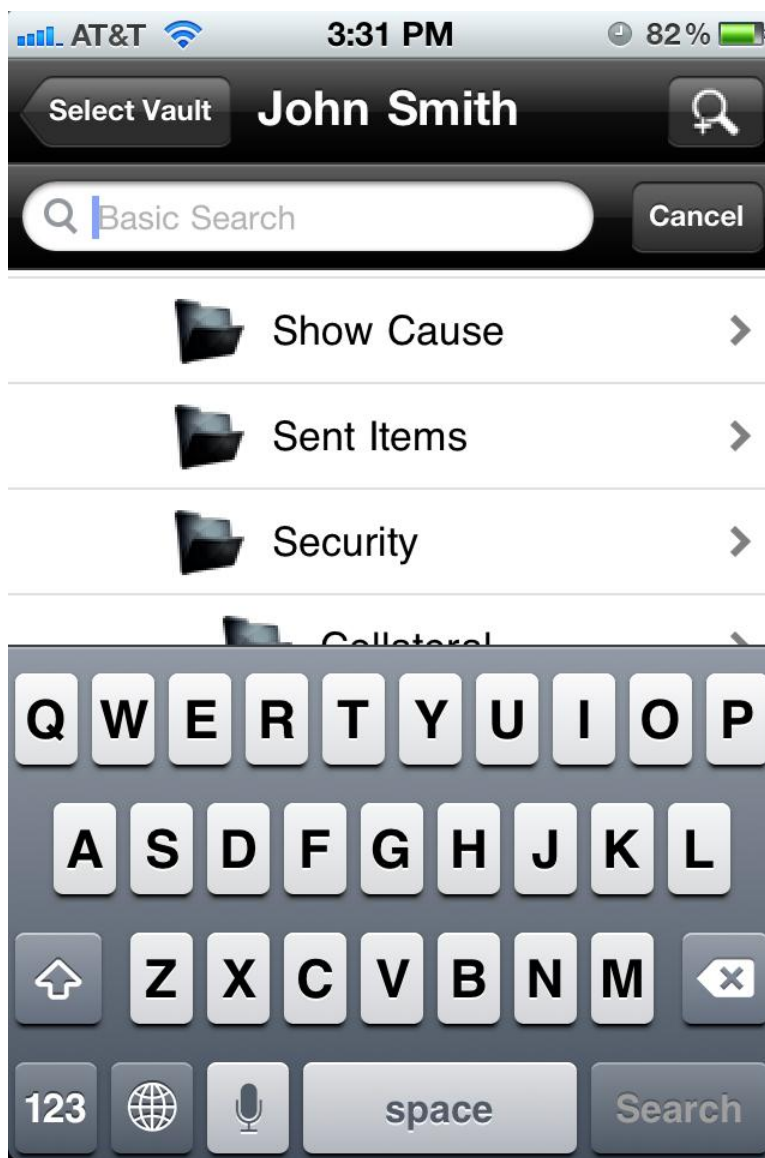


Figure 7 - Basic Search on an iPhone

### Advanced Search

If an item cannot be located with just a keyword search, ARCviewer's advanced search filters can be used to refine the results set. The advanced search dialog can be pulled up from anywhere within a basic search. Advanced search filters allow you to search your archives using all of the filters available on Enterprise Vault for Outlook, including:

- Date range
- Subject and body fields
- Attachment name, and attachment size

On the BlackBerry, Universal search allows users to search in ARCviewer easily from the BlackBerry home screen.

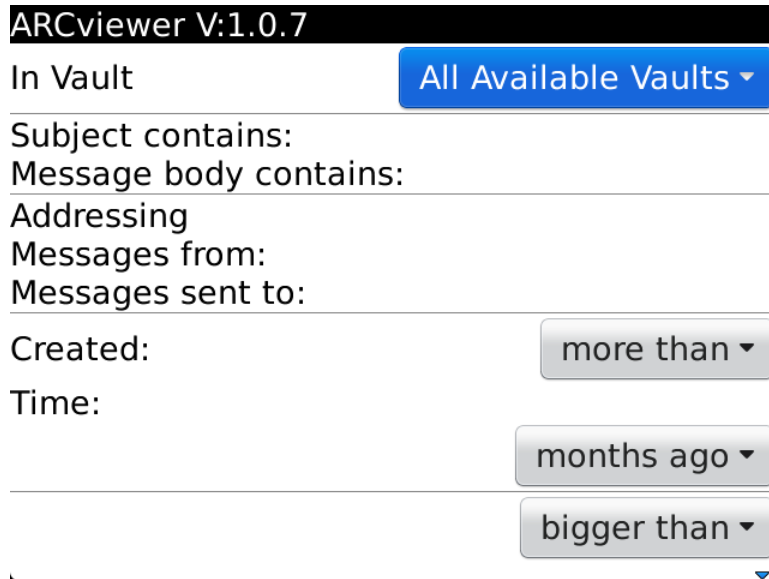


Figure 8 - Advanced Search on a BlackBerry

### Browse

Browsing in ARCviewer is similar to browsing archives in Enterprise Vault. ARCviewer gives users access to their complete folder hierarchy. This allows users to find items the way they're used to finding items in their desktop email inbox, navigating through folders, with items sorted by date.

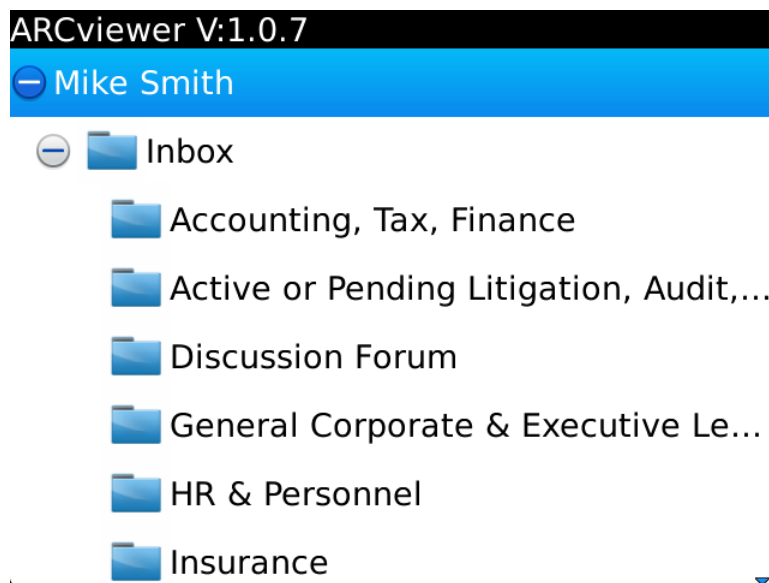


Figure 9 - Browsing archive folders on a BlackBerry

### View attachments and embedded links in archived messages

When an archived item is opened, it's rendered in HTML: links, contacts, and phone numbers embedded within messages are active and be clicked to navigate to the respective item. Paperclip icons indicate the presence of attachments.

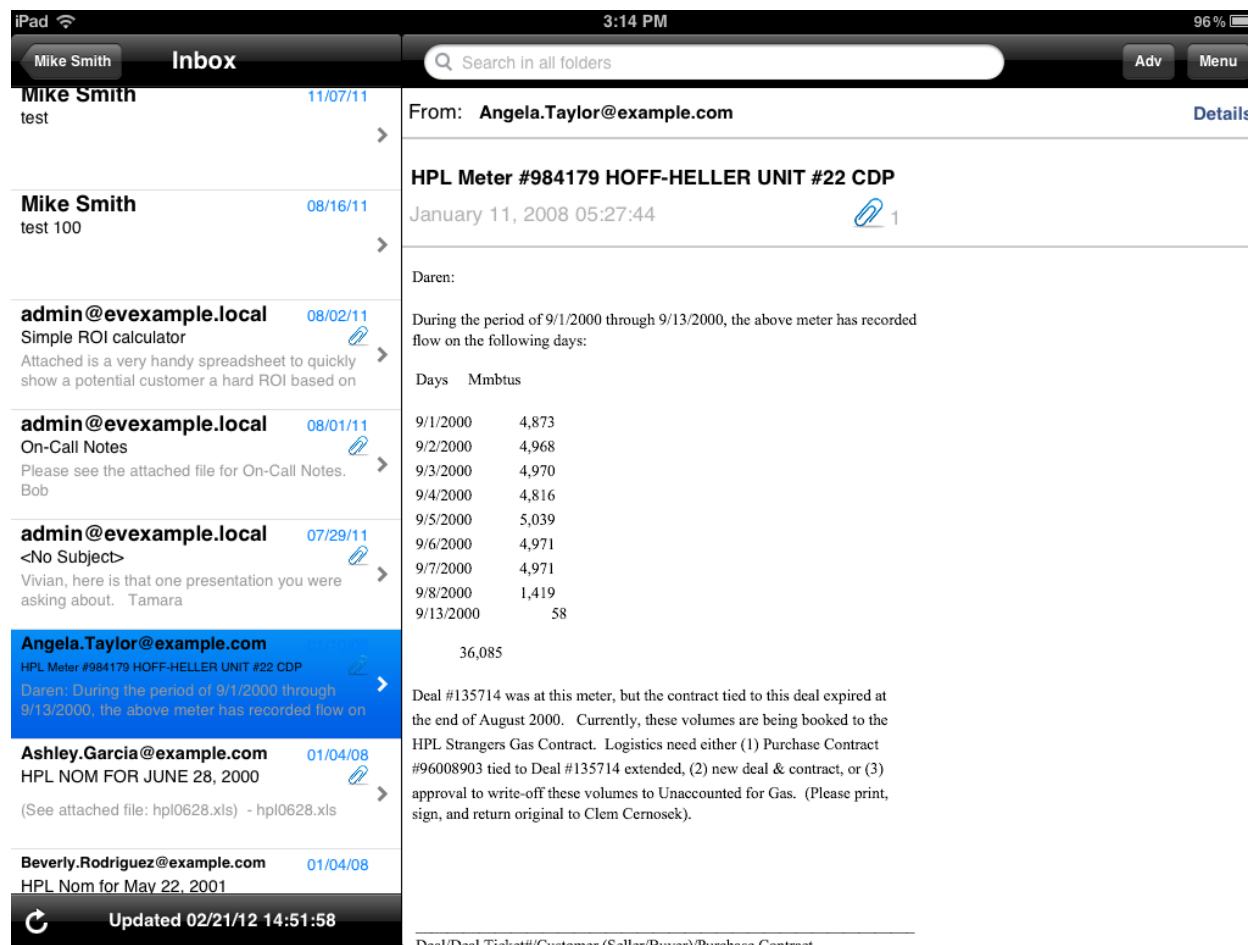


Figure 10 - Viewing archived messages on an iPad

### Retrieve archived items using “Send to Inbox”

ARCviewer’s “Send to Inbox” feature lets you send archived items to your mobile inbox, giving mobile users the ability to retrieve archived items in a way that is tailored to the mobile experience specific to their device. With Send to Inbox, archived items are sent to your inbox as new email messages, ensuring that the messages appear at the top of your inbox, making them easy to find and navigate to. Once these items are in your inbox, you can forward or reply to them, as well as access their attachments in the same way you would any other email. The archived item and shortcut (if enabled) are not removed from Enterprise Vault and Outlook during this process.

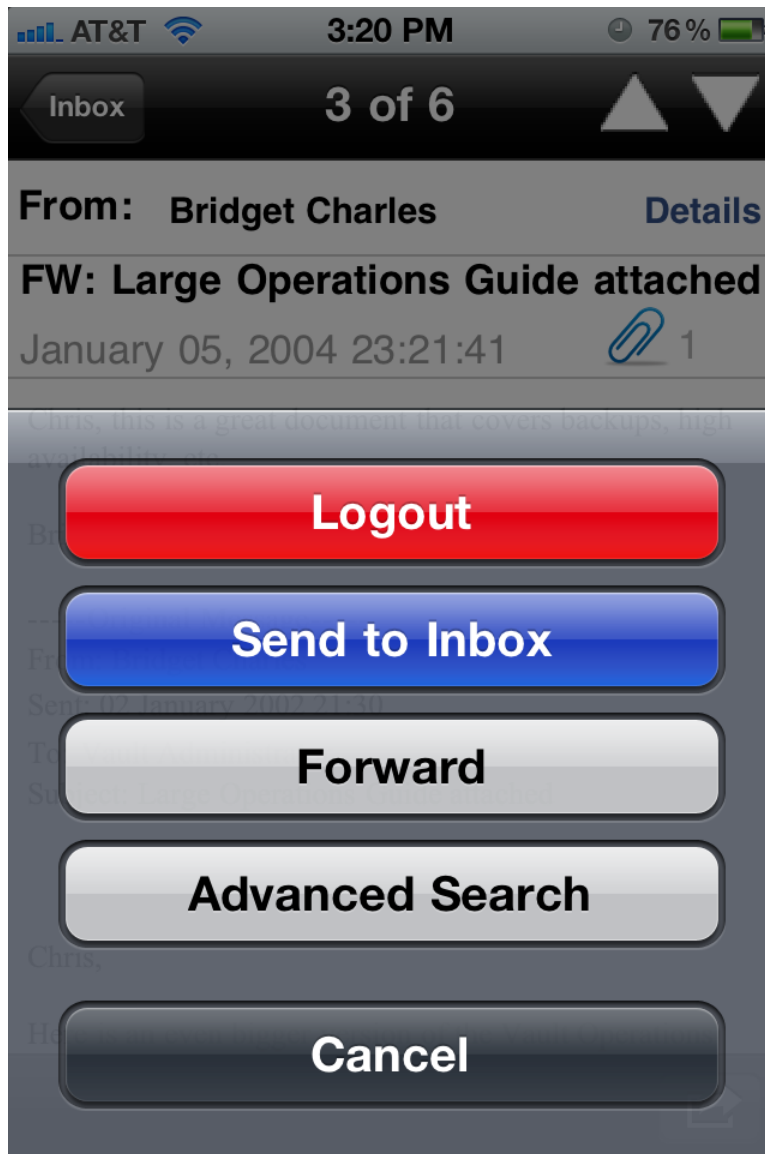


Figure 11 - "Send to Inbox" on an iPhone

### Store in Vault

ARCviewer's "Store in Vault" feature allows users to manage their archives — and free up inbox space — directly from their mobile devices. On the BlackBerry, this feature is integrated with the native inbox, and mail items can be archived directly from the BlackBerry mail app. For iOS devices, the mailbox section of the app can be used to search for and archive inbox items.

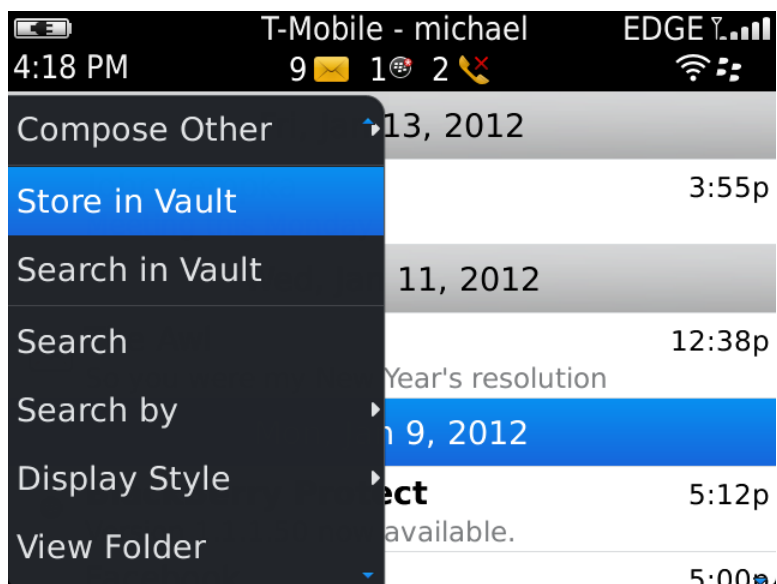


Figure 12 - "Store in Vault" on a BlackBerry

### Supported Mobile Devices

ARCviewer currently supports the following mobile devices:

- Blackberry (supporting OS versions 4.5-7.0)
- iPad/iPhone (supporting iOS 4+ using Apple's built-in VPN software)
- Support for Android devices is planned

### ARCbridge and CommonDesk 360 Overview

#### ARCbridge

ARCbridge is the server application that links mobile devices with Enterprise Vault. It manages the secure interaction to your Enterprise Vault server. It also enables organizations to maximize performance capabilities by allowing users in different regions to be managed by different servers.

For BlackBerry devices, a request is generated from ARCviewer on a mobile device and received by the BlackBerry Enterprise Server. This request is in the form of an HTTP connection. This request will then be passed on to the ARCbridge application. ARCbridge will then make one or more calls to the Enterprise Vault environment.

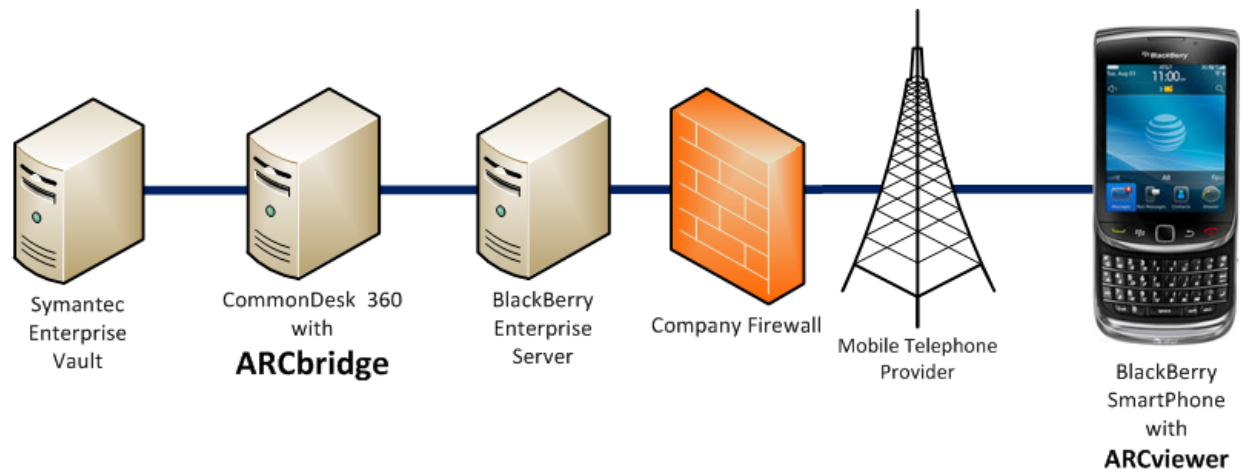


Figure 13 - ARCviewer & ARCbridge with BlackBerry devices

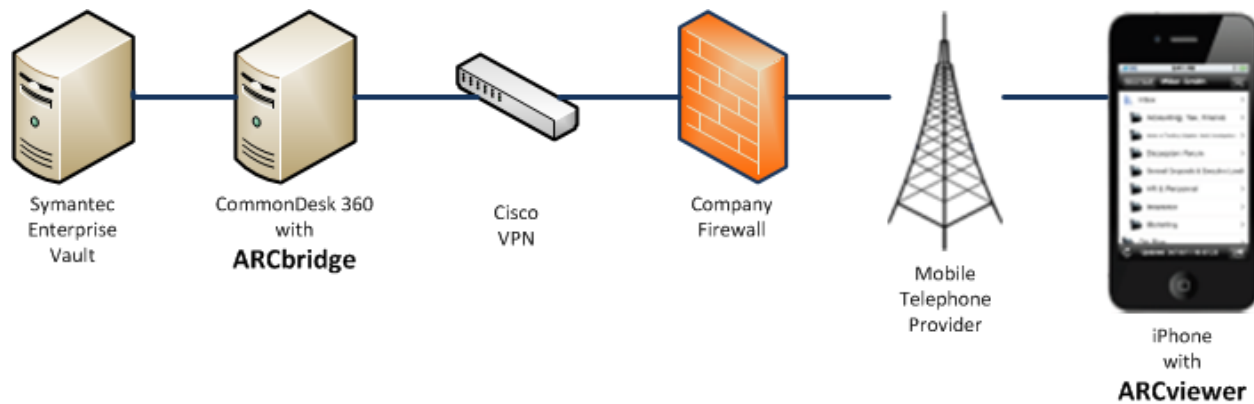


Figure 14 - ARCviewer & ARCbridge with iPhone Devices

For iPhone and iPad devices, a request is generated from the ARCviewer app. If connected to the enterprise network via the Apple approved VPN connection, the request is received by the ARCbridge application. ARCbridge will then make one or more calls to the Enterprise Vault environment.

### ARCbridge for Enterprise Deployments

ARCbridge is designed to provide an enterprise-ready feature set, making it suitable and scalable for large enterprise deployments. ARCbridge supports multiple-instance scaling, allowing administrators to install ARCbridge on one or more servers across their organization. Each service instance has a separate console area for managing the users assigned thereto.

Administrators can add large number of users by group, making it easy to manage large-scale deployments.

ARCbridge provides complete security by authenticating against Active Directory, requesting that users enter their domain, username, and password before they are allowed access. Users are granted access rights according to their domain credentials.

ARCbridge is able to handle the load placed on an organization's environment by limiting the number of simultaneous connections it makes to each Enterprise Vault server. Load from the ARCviewer client is managed by ARCbridge by allowing administrators to redirect users to specific Enterprise Vault instances.

### **CommonDesk 360**

CommonDesk 360 is the platform that provides the server infrastructure for ARCbridge and other CommonDesk products.

### **More Information**

For more information on CommonDesk's solution, visit <http://www.commondesk.com> or contact [info@commondesk.com](mailto:info@commondesk.com).



# APPENDIX A - Enterprise Vault Mobile Search Prerequisites and Installation

## Prerequisites for Installing Mobile Search

In a production environment, it is recommended that Mobile Search be installed on a system that does not have any of the following components installed:

- Enterprise Vault server
- Microsoft SQL server
- Microsoft Exchange Server (the target system for Enterprise Vault archiving)
- BlackBerry Enterprise Servers

Windows 2003 SP2 or Windows 2008/2008 R2 (and later) can be used to host Mobile Search. The following requirements are for Windows 2003:

- NTFS file system
- Microsoft .NET Framework 2.0 (32-bit)
- Microsoft Internet Information Services (IIS) – Ensure that ASP.NET is allowed in IIS Web Service Extensions
- If running on a 64-bit version of Windows 2003, you must have IIS set to 32-bit operation. See <http://support.microsoft.com/?kbid=894435> for more information

For Windows 2008/2008 R2:

- NTFS file system
- Microsoft .NET Framework 2.0 (32-bit)
- Microsoft Internet Information Services (IIS) – Ensure that ASP.NET is allowed in IIS Web Service Extensions

Additionally for IIS 7.x, it is recommended that the following role service components be added to the Web server role as detailed in Table 1.

Role service	Recommended Components
<b>Common HTTP Features</b>	Static Content Default Document Directory Browsing HTTP Errors
<b>Application Development</b>	ASP.NET .NET Extensibility ISAPI Extension ISAPI Filters
<b>Health and Diagnostics</b>	HTTP Logging Request Monitor
<b>Security</b>	Basic Authentication Request Filtering
<b>Performance</b>	Static Content Compression
<b>Management Tools</b>	IIS Management Console

**Table 1 - IIS 7.x Recommended Components**

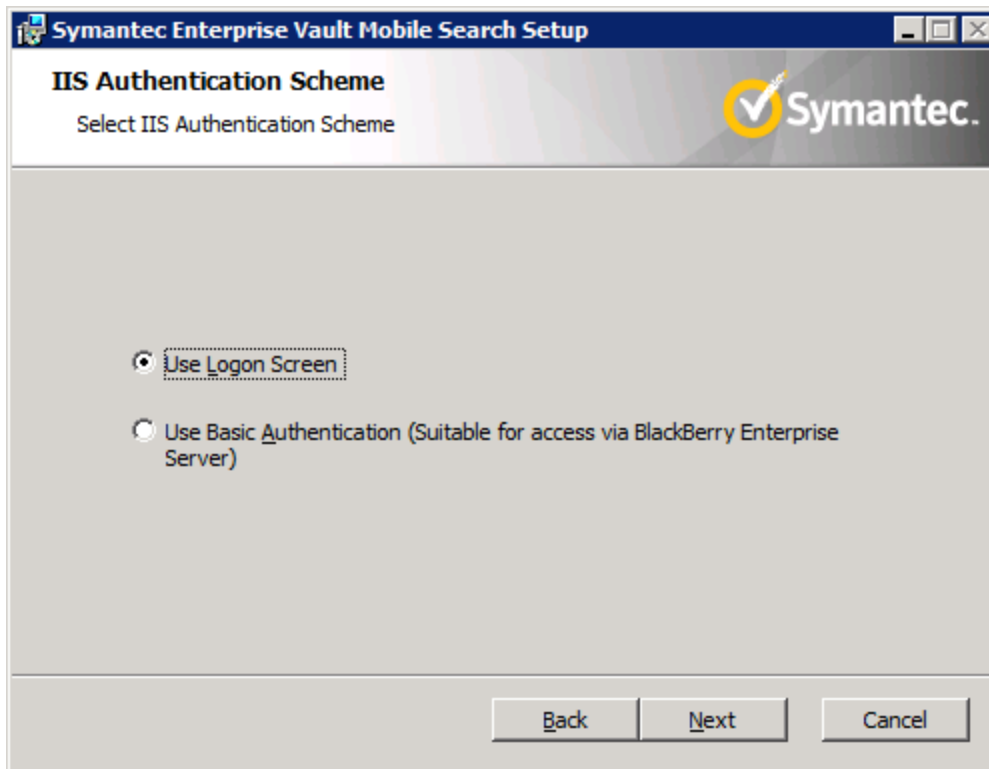
The Enterprise Vault API Runtime is also required to be installed for Mobile Search. The MSI installation package can be found on the Enterprise Vault installation media in the *\Symantec Enterprise Vault <version>\API Runtime* folder. This package must be installed before installing Mobile Search. It is required that the version of the EV API Runtime match the version of Enterprise Vault. For example, if Enterprise Vault 10 is being used, the EV 10 version of the API must also be used.

Additionally, an https binding must be set up for the Default Web Site in IIS. Refer to Microsoft IIS documentation on setting up SSL certificates and bindings.

## Mobile Search Installation

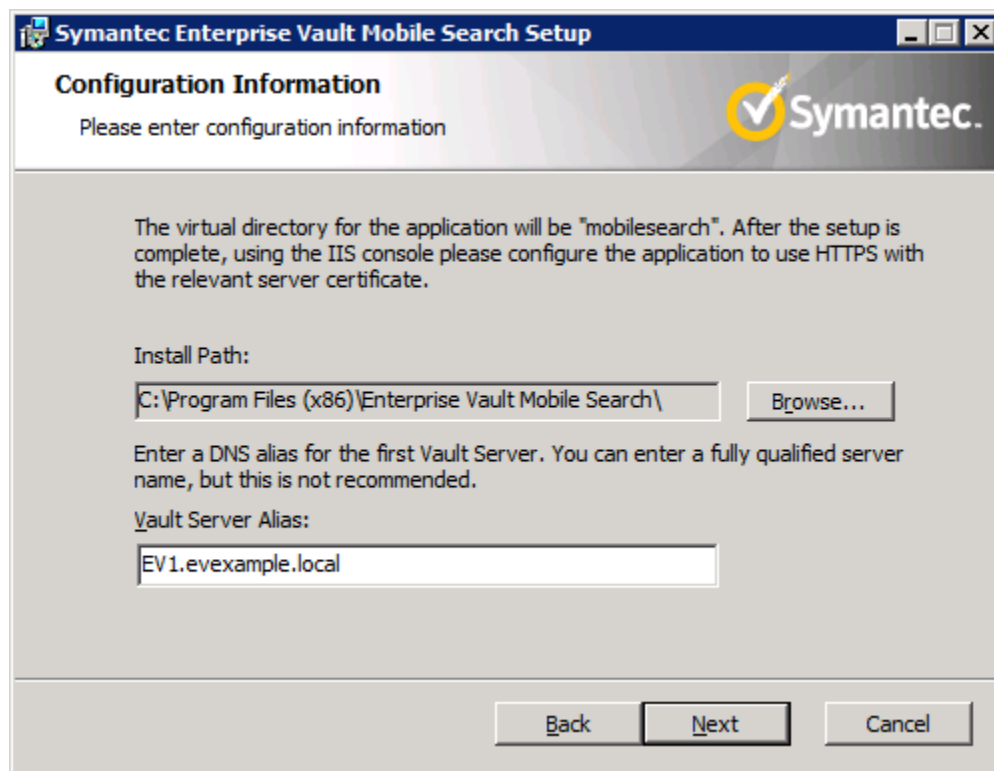
Use the following steps when installing Mobile Search:

1. Ensure that IIS is installed with the necessary prerequisites
2. Ensure that there is an https binding to the Default Web Site in IIS
3. Ensure that the Enterprise Vault API Runtime is installed
4. Run the "Symantec Enterprise Vault Mobile Search.msi" package from the Enterprise Vault installation media. The installation package can be found in the *\Symantec Enterprise Vault <version>\Mobile Search* directory.
5. The installation process will ask for an IIS Authentication Scheme (as shown in Figure 15). There are two options, Use Logon Screen or Use Basic Authentication. When selecting Use Logon Screen, a mobile user would be required to enter their Active Directory login on the web page itself. When using "Use Basic Authentication", IIS will prompt the user for login credentials by having a separate popup window.



**Figure 15 - IIS Authentication Scheme**

6. The next screen will prompt for the installation path and DNS alias for the primary Enterprise Vault server (as shown in Figure 16).



**Figure 16 - Configuration Information**

7. Finish the installation.

8. Once the installation has finished, test to see if the installation was successful by bring up the URL for Mobile Search (such as <https://evmobile/mobilesearch>) using any web browser.

## **APPENDIX B - Requirements for Running CommonDesk 360 and ARCbridge**

The following list details the environment and server requirements for running ARCbridge:

- Windows 2003/2008/2008 R2 server
- VMware 4.0 and 5.0
- Hyper-V 2008 R2
- 2GB free disk space on the server that will run ARCbridge
- Microsoft SQL server 2005 or 2008
- Enterprise Vault 8, 9, or 10
- Enterprise Vault API
- For BlackBerry access, BlackBerry Enterprise Server 4.1 or 5.0
- For Apple devices, VPN

## About Symantec:

Symantec is a global leader in providing storage, security and systems management solutions to help consumers and organizations secure and manage their information-driven world.

Our software and services protect against more risks at more points, more completely and efficiently, enabling confidence wherever information is used or stored.

For specific country offices and contact numbers, please visit our Web site: **[www.symantec.com](http://www.symantec.com)**

Symantec Corporation  
World Headquarters  
350 Ellis Street  
Mountain View, CA 94043 USA  
+1 (650) 527 8000  
+1 (800) 721 3934

Copyright © 2012 Symantec Corporation. All rights reserved. Symantec and the Symantec logo are trademarks or registered trademarks of Symantec Corporation or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.