

Flexible Computing

Hosted Exchange 2007 Service

DECISION TREE

Classification	Commercial in Confidence
Author	Mark Craddock
QC Approval	Internal
File Name	FLEXIBLE COMPUTING - HOSTED EXCHANGE 2007 - DECISION TREE - 0.2.DOCX

1 VERSION HISTORY

Date of Issue	Version No.	Reason for Change
23 rd March 2009	0.1	Initial document
23 rd March 2009	0.2	Initial document

2 SIGN-OFF LIST

This document has been issued to the following people for sign off.

Name	Purpose of review	Signature	Approval Date
	The document outlines a solution that is aligned to the Scottish Enterprise Architecture		
	The document meets the required quality standards of Scottish Enterprise		
	The document meets the required governance standards of Scottish Enterprise		
	The document meets the required quality standards of Scottish Enterprise Service Delivery		
	The document meets the required quality standards of Scottish Enterprise Operations Data Centre		

3 DISTRIBUTION LIST

Name	Location	On behalf of...

4 SUPPORTING DOCUMENTATION

Location & Document Name	Author	Date

5 TABLE OF CONTENTS

1	VERSION HISTORY	2
2	SIGN-OFF LIST	2
3	DISTRIBUTION LIST	3
4	SUPPORTING DOCUMENTATION	3
5	TABLE OF CONTENTS	4
6	BACKGROUND.....	5
6.1	EVALUATING SOFTWARE-PLUS-SERVICES GUIDE	5
6.2	ON-PREMISES DEPLOYMENT.....	5
6.3	MICROSOFT EXCHANGE ONLINE	5
6.3.1	<i>Standard Offering.....</i>	<i>5</i>
6.3.2	<i>Dedicated Offering.....</i>	<i>6</i>
7	EXCHANGE HOSTED EVALUATION	7
7.1	DECISION FLOW	7
7.2	STEPS.....	7
8	STEP 1: CLIENT EXPERIENCE.....	10
8.1	OFFICE OUTLOOK WEB ACCESS	10
9	STEP 2: IMPACTS TO MAIL FLOW.....	12
10	STEP 3: DATA MANAGEMENT AND SECURITY IMPLICATIONS	13
11	STEP 4: RAMIFICATIONS ON BUSINESS OPERATIONS.....	14
12	STEP 6: EVALUATE RESULTS.....	15
APPENDIX A	PRICING.....	16
APPENDIX B	SCORE CARDS.....	17

6 BACKGROUND

This guide is written specifically to help technical decision makers and IT professionals evaluate Exchange Online for their organisations. This guide can be used to identify if the service can be hosted, and also the areas that are constraining hosting the service. If technical or process issues are identified that are constraining the service to on-premises, then these should be evaluated and the technical strategy updated to remove these in the future.

6.1 EVALUATING SOFTWARE-PLUS-SERVICES GUIDE

Software-plus-services combines cloud-based services delivery, where an application is hosted as a service and provided to customers across the Internet, with the rich interactivity and high performance achieved by a locally installed client. The software-plus-services model ensures that people can access the applications and information they need even when they aren't connected to the Internet.

The benefits of using this model include a reduction in the up-front expense of software purchases through the use of on-demand pricing. It can also help by freeing up valuable capital, IT staff, and other costly resources for more effective, strategic use within the organization. As a trade-off, customers relinquish control over software versions or changing requirements.

The choice of a deployment model depends on several factors, including the level of in-house messaging expertise, the need for control and customization, and the overall priorities of the IT group. Because organizations have the flexibility to deploy Microsoft Exchange as a server or a service, business needs, rather than technology constraints, can drive the choice. This guide will evaluate three methods of providing e-mail services: on-premises deployment and the Microsoft Exchange Online Standard and Dedicated offerings.

6.2 ON-PREMISES DEPLOYMENT

On-premises deployment is a model where software is installed and runs on computers on the premises of the organization using the software, rather than at a remote facility. The on-premises model provides organizations with the flexibility to perform maintenance, upgrades, and customization at their convenience. However, this model requires considerable up-front capital for such expenses as hardware, software, licenses, IT personnel for maintenance, and physical building space.

6.3 MICROSOFT EXCHANGE ONLINE

Exchange Online is a hosted enterprise messaging solution that is based on Microsoft Exchange Server 2007. This service provides rapid deployment and easy scalability. Customers also receive automatic upgrades to the latest technology, ensuring an easy and seamless upgrade experience.

Exchange Online is available as two offerings: Standard and Dedicated. Both offerings provide a comprehensive messaging solution at a simple per-user monthly fee, but each offers different degrees of customization and feature availability.

6.3.1 Standard Offering

The Exchange Online Standard offering provides the core business capabilities of Microsoft Exchange Server as a hosted service delivered from a shared server, multi-tenancy environment.

6.3.2 Dedicated Offering

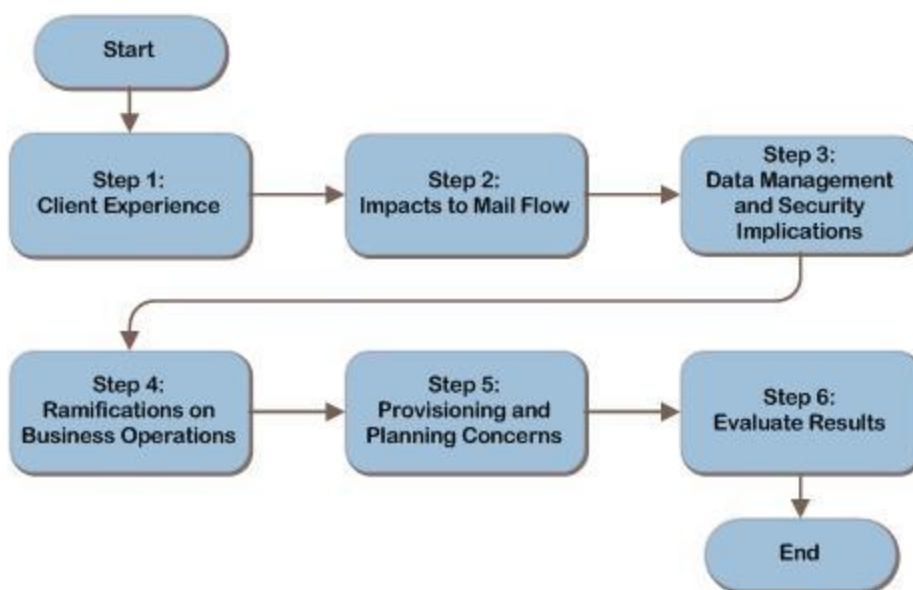
The Exchange Online Dedicated offering provides dedicated server(s) at Microsoft data centres to support each organization's messaging needs. It offers more flexibility in features and capabilities than the Standard offering and is designed for businesses having more than 5,000 seats, but it is optimized for 20,000 or more seats.

7 EXCHANGE HOSTED EVALUATION

This guide evaluates the Microsoft Exchange Online (Standard and Dedicated) and on-premises solution offerings in over 30 different areas of interest to technical decision makers, including client options, mail flow changes, operational impacts, and security concerns. The organization's needs will be rated in terms of importance, and the advantages and disadvantages of each offering will be evaluated against business requirements to provide a quantitative view of which offering will be best suited to serve the business's e-mail needs.

7.1 DECISION FLOW

The following figure provides a graphical overview of the steps in evaluating Exchange Online.



7.2 STEPS

This document contains six steps designed to guide the reader through the decision-making process about whether to use an on-premises e-mail service or the Microsoft Exchange Online Standard or Dedicated offering.

Step 1: Client Experience

- Office Outlook Web Access
- BlackBerry Devices
- Outlook Anywhere
- Macintosh Clients
- MAPII
- Single Sign-On
- IMAP and POP
- Unified Messaging
- Mobile Devices Using Exchange ActiveSync
- Mailbox Sizes

Step 2: Impacts to Mail Flow

- SMTP Relay Services
- Connectors to Other Systems
- SMTP Smart Hosting
- Transport Rules
- Line-of-Business Application Integration
- Public Folders
- Message Hygiene

Step 3: Data Management and Security Implications

- Network Security
- Archiving and Journaling
- Network Connectivity
- Signing and Encrypting Messages
- Data Isolation
- Information Rights Management
- Auditing

Step 4: Ramifications on Business Operations

- Service Continuity
- Adoption Rate for New Releases
- Disaster Recovery Testing
- Scheduled Maintenance
- Service Level Agreements

Step 5: Provisioning and Planning Concerns

- Active Directory Integration
- Capacity and Performance Planning

Step 6: Evaluate Results

The sixth step will assist the reader in evaluating the results of the first five steps.

These first five steps are not sequential and can be performed in any order, but all should be completed in order to obtain the fullest picture of the suitability and importance of the various technologies.

Within each step, each topic is subdivided into four elements:

- Definition of the topic.
- A rating of the importance of the topic to the organization.

- A comparison of the functionality available with the Exchange Online Standard and Dedicated offerings and the on-premises technology.
- A rating of how well each offering addresses the business's requirements for the topic.

Additional context may also be included where relevant to help the decision maker evaluate the impact associated with the decision.

8 STEP 1: CLIENT EXPERIENCE

This step addresses the messaging capabilities that most significantly influence the client experience. The topics covered in this step are:

- Office Outlook Web Access
- Outlook Anywhere
- MAPI
- IMAP and POP
- Mobile Devices Using Exchange ActiveSync
- BlackBerry Devices
- Macintosh Clients
- Single Sign-On
- Unified Messaging
- Mailbox Sizes

For each topic in this step, record the importance and solutions rating scores in the appropriate boxes in the table at the end of each topic.

8.1 OFFICE OUTLOOK WEB ACCESS

Microsoft Office Outlook® Web Access is an Internet browser-based version of Office Outlook that enables users to access their Exchange mailboxes without needing to install client software.

There are two versions of Outlook Web Access included in Exchange Server 2007: the Light client and the full-featured Premium client. Outlook Web Access Light is designed to optimize the experience for low bandwidth connections and browsers other than Microsoft Internet Explorer®. Outlook Web Access Premium is optimized for use with Internet Explorer and is a richer Web client experience.

Customizations may include multi-factor authentication, logon disclaimers, and specific feature enablement or disablement.

Importance Rating. Does the organization need to highly customize Outlook Web Access? Record the importance of this functionality in the table below.

Solutions Rating. With all three offerings, Outlook Web Access is available. The list below compares the specific functionalities of each solution:

- Standard offering. Supports both Outlook Web Access Premium and Light versions.
- Dedicated offering. Supports both Outlook Web Access Premium and Light versions. Dedicated allows for customization of the logon page to include usage guidelines or a disclaimer provided by the customer.
- On-premises solution. An on-premises environment offers the highest degree of customization and flexibility for Outlook Web Access including, for example, the ability to implement multi-factor authentication for additional security.

Evaluate how well each of the offerings addresses the business's requirements to customize Outlook Web Access and record the ratings in the table below.

Topic	Importance Rating	Standard	Dedicated	On-premises
Outlook Web Access	<1-5>	<0-3>	<0-3>	<0-3>

9 STEP 2: IMPACTS TO MAIL FLOW

This step addresses some of the impacts to mail flow resulting from changing to an Exchange Online environment. The topics covered in this step are:

- SMTP Relay Services
- SMTP Smart Hosting
- Line-of-Business Applications Integration
- Message Hygiene
- Connectors to Other Systems
- Transport Rules
- Public Folders

Different features are available depending on which offering is chosen. An on-premises environment will offer the greatest level of customization, and Exchange Online Standard the least. The following sections will present the functionality of each solution so that the needs of the organization can be measured against them.

10 STEP 3: DATA MANAGEMENT AND SECURITY IMPLICATIONS

The need for information security in today's highly networked business environment is more important than ever. Information is arguably one of an enterprise's most valuable assets, so its protection from accidental exposure or predators from both within and outside the organization is a top IT priority. This step explores some of the data management and security implications of storing data either on-premises or under someone else's control.

- The topics covered in this step are:
- Network Security
- Network Connectivity
- Data Isolation
- Auditing
- Archiving and Journaling
- Signing and Encrypting Messages
- Information Rights Management

11 STEP 4: RAMIFICATIONS ON BUSINESS OPERATIONS

Before deciding whether to use online services, existing on-premises e-mail services, or a combination of e-mail services, it is important to carefully examine the ramifications of this decision on business operations.

The topics covered in this step are:

- Service Continuity
- Disaster Recovery Testing
- Service Level Agreements
- Adoption Rate for New Releases
- Scheduled Maintenance

These topics will be used in evaluating the business operations concerns in this step, but they do not necessarily represent a comprehensive list. Each organization must consider its unique environment and needs.

12 STEP 6: EVALUATE RESULTS

In this step, the comparison ratings for each topic will be tallied so that a logical decision about which solution will best fit the needs of the organization can be made. At this point, each of the topics has been rated in terms of its importance to the business. Each offering has been rated in its effectiveness to meet the business's needs.

Appendix A Pricing

Service Offerings	List USL Price (Monthly per User)	List Step-Up USL Price (Monthly per User)
Exchange Deskless Worker	£1.34	No Step-Up
SharePoint Deskless Worker	£1.34	No Step-Up
*Deskless Worker Suite (25% Discount)	£2.01	No Step-Up
Exchange Online Standard	£6.69	£5.76
Office SharePoint Online Standard	£4.85	£3.56
Office Communications Online (Instant Messaging & Presence)	£1.67	£1.25
Office Live Meeting	£3.01	£1.98
BPO Suite (38% Discount) - Exchange Online Standard - Office SharePoint Online Standard - Office Communications Online - Office Live Meeting Online	£10.04	£8.13 (from CoreCAL) £6.65 (from ECAL)

Appendix B Score Cards