



### **Google Apps Implementation Project For:**



Statement of Work

Prepared by: Brad Trostel & Doug Sainato





### **Revision History**

Date	Version	Author	Changes	
12/8/2014	1.0	Doug Sainato & Brad Trostel	Created document	
12/12/2014	2.0		Created document to update project team and revise pricing tables.	
3/12/2015	3.0	Brad Trostel	Reduced hours and rate	
5/11/2015	5.0	Brad Trostel	Final Revisions (CBO NLWH)	





### **Table of Contents**

- 1. About MPC
- 2. Business Objectives
- 3. Project Overview
  - 3.1 Current Environment
- 4. Approach
  - 4.1 Development Location
  - 4.2 Deliverables
  - 4.3 Management Approach
    - 4.3.1 Status Reporting
    - 4.3.2 Issue Management
    - 4.3.3 Change Control
  - 4.4 Estimated Timeline
- 5. Project Team
  - 5.1 Project Sponsors
  - 5.2 Project Team
- 6. Scope
  - 6.1 Organizational Change Management Scope
  - 6.1.1 Communications
  - 6.1.2 Training
    - 6.1.2.1 Training Materials
  - 6.2 Technical Scope
    - 6.2.1 Systems
    - 6.2.2 Migrations
    - 6.2.3 Integrations
- 7. Risks
- 8. Assumptions and Constraints
- 9. Customer Responsibilities
- 10. Fees and Expenses
- Appendix A: System Requirements
  - Google Apps Directory Sync (GADS)
  - Cloud Technology Solutions CloudMigrator





This Statement of Work (SOW) entered into between the Monterey Peninsula College ("MPC") and Onix Networking Corp. ("Onix"). The Terms and Conditions referenced herein shall comprise the agreement ("Agreement"). Onix shall perform consulting services as described within this SOW.

#### About MPC

MPC is a fully accredited California public community college. With an open admissions policy, the college is known for the excellence of its academic programs and student support services. The college has been recognized as a top military friendly school.

### 2. Business Objectives

The objective of the project is to deploy Google Apps for Education (GAfE) for MPC, including Gmail, Calendar, Contacts, Hangouts, Drive (including Docs, Sheets and Slides), Sites, Google+, Classroom, and <u>Vault</u>. Please see this <u>link</u> for GAfE product descriptions.

### 3. Project Overview

#### 3.1 Current Environment

Based on information gathered during our discussions and discovery sessions, we understand MPC's current environment includes the following:

- Total users: approximately 15,000
- Email & Collaboration platform: Microsoft Exchange 2010
- Total email/calendar/contact data to be migrated: 913 GB not including PST files
- Directory services platform: Microsoft Active Directory
- Single Sign-On (SSO) platform: Shibboleth
- Unified Communications platform: Cisco Unity Connect

### 4. Approach

MPC will conduct a three phased approach for deploying Google Apps to roughly 15,000 users.

Phase 1 will be preceded by a planning and design phase. During this period, Onix will work with MPC to identify and document key technical components, integrations and architectures. We will also finalize the project plan and deliver a Deployment Blueprint.

The first phase, called "Core IT Adoption" will be made up of mostly users from IT. The purpose of this phase is to test out the technical configurations, integrations, migrations and mobility before bringing on business users.





The second phase, called "Early Adopters" will incorporate 5-10% of the total user population, comprised of business users representing various job functions, levels, geographies, and departments from across the business. The purpose of this phase is to test out the communications and training as well as to build out Google Guides.

A Google Guide is a person who is an early adopter, someone who is excited about the transition, and will help advocate for the solution. They will also help during go-live week to walk around and ask if others need help or have questions. This approach has worked very well at all other rollouts. Investing in these key users during Phase 2 through additional training and communication can ensure a much more successful rollout in Phase 3, the "Global Go-Live".

Phase 3 will either be done all at once, or in phases based on geographic locations.

#### 4.1 Development Location

Onix Networking will conduct this project in a blended model where work will be performed both on-site as well as remotely. At times, Onix Networking may wish to be on-site to do activities like project kickoffs, however, there are tasks that are suited to off-site as well. Onix Networking will work with MPC to provide the best and most cost-effective use of time and resources.

At times when there is on-site work to be performed, Onix Networking will work at the facilities listed below:

Monterey Peninsula College - Main Campus





980 Fremont Street Monterey, CA 93940

### 4.2 Deliverables

This table lists the formal project deliverables.

Deliverable	Description		
License provisioning	Upon receipt of the signed contract documents, Onix will order Google Apps licenses for the total number of users required. We will use the www.mpc.edu domain.		
Project Plan	The Project Plan will be delivered in a Google Spreadsheet format (shared with team via Google Drive). The Project Plan provides a detailed view of the tasks required to complete the deployment and is used to track overall progress.		
Setup and configuration of the Google Apps Admin Console	Onix will perform the initial configuration the Google Apps Admin Console with the appropriate settings and policies. These settings and policies will be detailed in the Deployment Blueprint. Onix will work with MPC to determine the appropriate settings and policies as part of the Deployment Blueprint development.		
Setup and configuration of Google Apps Vault	Onix will perform the initial configuration of the Google Apps Vault service. Configuration policies will be detailed in the Deployment Blueprint and agreed upon by Onix and MPC.		
Provisioning - Users, shared contacts and distribution lists	Consulting and training on the creation of Microsoft Active Directory (AD) queries to support provisioning and deprovisioning of users, shared contacts and distribution lists from AD sources using the Google Apps Directory Sync (GADS) tool.		
Provisioning - Calendar Resources	Onix will load calendar resources into the Google Apps environment. Onix will also provide training for the management of resources to administrators.		
Single Sign On (SSO)	Onix will configure the Service Provider (SP) side of the Shibboleth SAML2 Single Sign-On environment via the Google Apps Admin Console.		
	Onix will install and configure the CloudMigrator software. Onix will perform test migrations, scope the migration server requirements, migrate email, contacts and calendar data from Microsoft Exchange 2010 to Google Apps and troubleshooting issues that may arise during the migration process.		
Additionally, Onix will migrate .PST email archive files for faculty users Server Side Migration centralized network file share.			
Training Plan	Onix will work with MPC to refine the training plan in this document to include the dates, times, locations and delivery mechanisms.		
Recorded training content	Onix will provide recorded training content. This content will be available through the End-User Learning Center Site.		





T	Onix will deliver training for audiences via webinars and on-site sessions as			
Training sessions	determined by the training plan below.			
Communications / Change Management Plan	Onix will work with MPC to develop a detailed communication plan. This plan includes the types of communications to be used at various steps in the project. Examples of this are: email message to all employees from the CEO at project kick-off, messaging for manager to employees, placement of posters or tent cards and more. Based on the overall project plan, the communication plan defines what types of communications go out at which times, to which community of users, the goal of the communication and the delivery method.			
	Onix will create an End-User Learning Center site using the Google Sites service. This site will be setup on MPC's domain.			
	The Learning Center will be populated with recorded training materials, FAQs, cheat sheets and other items end-users will find useful for their transition to			
End-User Learning Center	Google Apps.			
	Onix will create a Project Site use Google Sites and set this up on MPC's domain.			
	The Project Site is a consolidated repository of all project artifacts, meeting notes, communication templates and samples and more.			
Project Site	During the deployment project, team members from MPC, Google and Onix will use the Project Site for various collaboration efforts.			
Microsoft Active Directory (AD) Design Review	Onix will provide an AD best practices and design review session for integration with Google Apps and overall management.			
SMTP Relay service (optional)	Optionally, Onix will implement the Gmail SMTP relay service for mail enabled devices such as printers and scanners.			

#### 4.3 Management Approach

The following sections describe the management approaches and procedures.

#### 4.3.1 Status Reporting

Onix Networking may produce a weekly status report for MPC that provides the following information:

- Accomplishments for the week
- Tasks or milestones for the upcoming week and planned hours against those items
- Issues that may require management attention
- Risks to the project's success
- Timesheet summary for hours worked by Onix Networking resources

In addition, Onix Networking recommends regular project status meetings with MPC to ensure activities stay on track.





#### 4.3.2 Issue Management

Issues requiring MPC's attention will be documented in the weekly status report. MPC and Onix will attempt to resolve identified issue within a prescribed timeframe. If the issue cannot be resolved, it will be escalated further and addressed by MPC and Onix Networking's senior management.

#### 4.3.3 Change Control

Changes that affect the project's scope and which impact the project's schedule shall be defined, documented and escalated to MPC and Onix's senior management. Change requests must be mutually agreed upon by both parties prior to beginning any new activity not defined in this SOW. Any additional work shall be billed per the rates listed within this SOW.

#### 4.4 Estimated Timeline

This is a high-level estimated timeline for the implementation assuming a start date of April 15, 2015 and using a standard 3-phased deployment. The final project timeline will be confirmed, and a detailed project plan will be shared in a Google Spreadsheet immediately after contract signature.

PHASE	NOTES	MONTH 1	MONTH 2	MONTH 3	MONTH 4
1. Core IT Wave (~20 users)	IT Staff				
* Project Management	Project kickoff, monitor activities & issues, finalize plan				
* Technical Configuration	Domain setup, technical assessment, mail forwarding				
* Change Management	Plan communications & training, training site, Core IT training				
* Go-Live					
2. Early Adopters (5% users)	Google Guides				
* Project Management	Monitor project activities & issues				
* Technical Configuration	Configure GMS & GMD, GADS, scripting, SSO				
* Change Managment	Google Guides, Early Adopter training				
* Go-Live					
3. Global Go-Live (all users)	Everyone				
* Project Management	Monitor project activities & issues, close out project				
* Technical Configuration	Groups, Calendar Resources				
* Change Management	Internal marketing, communications, end user training				
* Go-Live					
	Color & Shortcut Legend				
	Project Phase	р			
	Workstream	w			
	Go-Live	g			
	Stability Period	S			

### 5. Project Team

### 5.1 Project Sponsors





This section comprises the stakeholders and escalation points for the project.

Name	Title	Organization
Dr. Walter Tribley	CEO	MPC
MPC CBO	BO CBO MPC	
Michael Midkiff	Director of IS (Project Manager)	MPC
Tony Bianco	President, Cloud Computing	Onix Networking
Dave Lyon	Director of Professional Services	Onix Networking

### 5.2 Project Team

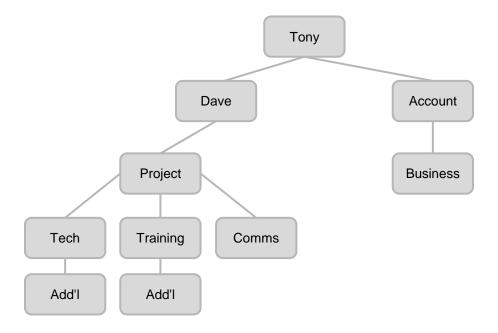
This section comprises the project team members, both full and part-time.

Name	Title/Role	Organization
	Senior Consultant - Technical	
Rodney Dore	Lead	Onix Networking
TBD	Project Manager	Onix Networking
TBD	Communications Lead	Onix Networking
TBD	Training Lead	Onix Networking
Doug Sainato	Solutions Engineer	Onix Networking
Brad Trostel	Enterprise Account Manager	Onix Networking
Laura Loera	Partner Operations Manager	Google
Patrick Schablitzki	North American Partner Operations Manager Lead	Google

The Onix Networking project team is organized in the following structure:







### 6. Scope

This section identifies which systems, people and processes are in scope for the implementation project. Items not mentioned in this section of the SOW will be assumed to be out of scope.

### 6.1 Organizational Change Management Scope

#### 6.1.1 Communications

The following items are considered in scope for the project. MPC is responsible for the execution of the communication items such as sending out the emails to the end-users.

- Input to the crafting of a Communication plan for the rollout
- Communication workshops
- End User Learning Center Site (Google Site with content for end users)
- Project team site (Including Tent Card templates, Poster templates, and Email templates for communications)
- User surveys (initial communication, training, post deployment)

#### 6.1.2 Training

This section details out the Training scope for the project.

		# of Live	# of Web
End User Courses	Course Description	Sessions	Sessions





Apps 110 - Advanced Messaging for Google	In-Depth coverage of GMail, Calendar, Chat, Contacts along with Labs, Settings and tips/tricks for		0
Apps 204 - Google Groups	users; targeted at Alpha users and Google Guides  This class introduces Google Groups interface to organization that have user-managed groups enabled. We will cover the basic settings and how to create a new group, invite users and adjust permissions based on group type.		1
Apps 210 - Collaboration for Google Guides	In-Depth Coverage of Docs, Sites and Video		2
Apps 801 - Help Desk Workshop	This course will give your internal Help Desk or IT Team the tools and best practices to troubleshoot Google Apps end user issues. It also details support processes for items outside of the sore suite of products like Mobile Devices, Browsers and other commonly tracked issues within the Google Apps environment. Upon completion of this course you will be able to:  Identify the various modules of Google Apps Know the steps to take when troubleshooting Know what tools to use when troubleshooting Know how to open a case with Google Have access to FAQs  Prerequisites for this course are either Apps 101 or Apps 110		1
Admin Courses	Course Description	# of Live Sessions	# of Web Sessions
Apps 901 - cPanel Workshop	This course provides an initial uncovering of the Google Apps Control Panel to your organization's admins. We will explain the service settings for each of the core products, how we will enable services for the deployment and how to create additional delegated admins for your domain. In addition, you will learn about user and organization management, Google Groups creation and management and Calendar Resources management.		1
Apps 903 Google Vault	This course explains how to set retention rules, create matters, place accounts on hold and how to search and export data from Google Vault. We will		1





	also review the administrative settings in Vault so delegated access can be granted to additional managers and legal experts.		
Other Courses	Course Description	# of Live Sessions	# of Web Sessions
Apps 502 - Train the Trainer	Teach your Training Department Google Apps in order to train your users. Onix recommends 2 half-day sessions in English and 1 in Spanish.		
Apps 501 - Ask the Expert	Administrators, IT Help Desk, and Google Guides ask questions of Onix Google Apps experts on what to expect life after Going Google.		1

#### 6.1.2.1 Training Materials

This section details out the training materials for the project. All materials are in English-only unless otherwise noted.

- Gmail Slides
- Gmail Recorded Content
- Gmail Quick Reference Guide
- Gcal Slides
- Gcal Recorded Content
- Gcal Quick Reference Guide
- Gdocs Slides
- Gdocs Recorded Content
- Gdocs Quick Reference Guide
- Google Sites Slides
- Google Sites Quick Reference Guide
- FAQs
- Google Apps Learning Center (learn.googleapps.com)
- Mobility User Guides

Note - The materials being provided by Onix are typically updated annually, and thus the screenshots reflect that particular moment in time when they were created. If MPC wants more recent recordings, Onix partners with Boost eLearning to provide recorded content that is typically no more than two weeks old at any point in time. That is an additional charge if requested.

The Recorded Content for course materials will be made available for free during MPC's Google Apps deployment. The training materials will be made available on the End User Learning Center Site that Onix Networking will set up during the course of the deployment. The materials





are for internal employee use, and may not be re-used for external entities. MPC agrees not to put these materials on public sites, or make the sites public to share outside the domain.

<u>Training materials are being offered free of charge for all phases of the project as long as Onix is used as the reseller for all Google Apps and Google Vault licenses.</u>

#### 6.2 Technical Scope

6.2.1 Systems

This section defines applications, software, systems or products that are in scope for the project.

System Name	Description	
Google Mail (Gmail)	Mail Application	
Google Calendar	Calendar Application	
Google Hangouts	Instant Messaging, group text, voice, video and video conference service	
Google Drive/Docs	Document storage, management and collaboration platform	
Google Sites	Website creation platform	
Google Groups	Enhance distribution list and collaborative mailbox service	
Google Apps Email Security	Provides email routing and virus scanning technology, compliance and policy enforcement.	
Google Apps Directory Sync (GADS)	Free tool from Google that synchronizes user accounts, us profiles, shared contacts and groups between Microsoft Acti Directory and Google Apps.	
CloudMigrator	Migration tool from Cloud Technology Solutions that migrates mail, calendar, contacts and public folders from Microsoft Exchange servers to Google Apps	
Google Apps Vault	Archiving and eDiscovery solution	
Microsoft Exchange	Microsoft Exchange 2010	
Microsoft Outlook	Current mail client	
Microsoft Active Directory	Source for user account, user profile, shared contacts and group information used by GADS for synchronization with Google Apps	

### 6.2.2 Migrations

This section defines source and destination systems for the migration effort.

Source System	Destination System(s)	Notes
Microsoft Exchange	Google Mail	CloudMigrator will migrate data





_	from Exchange to the appropriate
Google Contacts	service in Google Apps.
,	CloudMigrator will also migrate
	PST file data.

### 6.2.3 Integrations

This defines the integrations necessary for the project.

System	Integration Notes
Microsoft Active Directory (AD)	MPC's AD service will be the "source of truth" for all account and profile information. Google Apps user management (adds, changes, deletions, suspensions), as well as profile data will be managed through the Google Apps Directory Sync (GADS) service. GADS will synchronize user account, user profile, domain shared contacts and distribution list information between AD and Google Apps.
Shibboleth Single Sign-On (SSO)	Google Apps will be configured as the Service Provider (SP) and will redirect authentication requests to MPC's SSO service. The SSO service will be the Identity Provider (IdP) and will authenticate users against the local directory. Successful authentication requests will be re-directed back to Google Apps with a valid SAML2 authentication assertion. For more information on Google's implimentation of SAML2 based SSO, please visit - <a href="http://goo.gl/yp8PK">http://goo.gl/yp8PK</a>
SMTP Gateway (optional)	An on-premise SMTP server will provide outbound email gateway services to applications and devices that cannot support authenticated SMTP connections that Google requires. Internal applications or devices that send messages via SMTP will be configured with the SMTP gateway as the SMTP server and will connect to the gateway unauthenticated. The SMTP gateway will then connect to Google using an authenticated session to relay the message through Google's email service.

### 7. Risks

This section describes some of the key project risks and their potential effect on the project's success. This is a preliminary list; risks will continue to be identified and mitigated throughout the life of the project.

Risk	Description	Impact	Mitigation
	In a multi-domain environment that is		Educate MPC on multi-
Namespace	migrating to Google Apps, name		domain configuration
Collisions	space collisions may occur if the	Impact to schedule	options in Google Apps





appropriate domain structure is not		and the implications.
configured or if an organization's		Data cleansing in the
requirement affects dictates a specific	;	source directory may be
configuration. An example of a		required depending on
namespace collision could be when		design decisions.
joe.user@domain.com and		
joe.user@alias.domain.com are		
supposed to be two separate		
identities but a Google Apps domain		
design decision forces the two		
identities to be one user.		

### 8. Assumptions and Constraints

This section identifies the major assumptions and constraints used to establish the project estimates, plans, and approach.

Assumptions are expectations that form the basis for decisions. Constraints are a restriction associated with the project.

Assumption or Constraint	Potential Impact
MPC will provide access, as needed, to subject matter experts as it relates to this project	Impact to cost and schedule
MPC will execute all assigned tasks promptly	Impact to cost and schedule
MPC will have all necessary licenses for Google Apps, Onix Networking products or any other third-party products needed.	Impact to cost and schedule
Upon signature of this Statement Of Work (SOW), Onix Networking may add MPC to our sales and marketing collateral.	No Impact
The free Onix training content (Self-Paced Materials) in training section above will be provided to MPC in English only. The free Onix training content may not have the latest feature and functionality releases from Google. Any requested customization of these materials may result in additional costs.	
Google also provides online training material in 9 languages found at learn.googleapps.com.	
MPC also has the option of using Boost eLearning for "Version .Now" Training in French and English at an additional cost. Boost eLearning is not included in this SOW.	Impact to cost and schedule
On-Site training will be done in English	Impact to cost and schedule
Webinar training will be available to MPC in English. Additional languages	Impact to cost and schedule





Impact to schedule
Impact to schedule
Impact to schedule
Impact to cost and schedule
Impact to cost and schedule
No impact
Impact to cost and schedule

### 9. Customer Responsibilities

This section identifies the customer's responsibilities and the impact on the project if these responsibilities are not fulfilled.

Customer Responsibility	Potential Impact
MPC will be responsible for verifying domain ownership through DNS TXT record or HTML authentication for the provisioned domain	Schedule impact
MPC will review and approve work on a timely basis	Schedule and budget impact
MPC will provide subject matter expertise related to MPC's systems for networking, Microsoft Exchange, Active Directory, Shibboleth and other systems related to the project.	Schedule and budget impact
<ul> <li>MPC will provide the necessary infrastructure for the project, including:</li> <li>Office facilities for Onix Networking personnel (if on site work is done)</li> <li>Development/test instances of the applications, including IDs and passwords</li> <li>Product documentation related to MPC's systems</li> <li>Sample data for unit and integration testing</li> <li>Required hardware, software and network access (as needed and applicable)</li> </ul>	Lack of the necessary development infrastructure will limit the team's ability to perform work and to meet the planned schedule
MPC will be responsible for identification of key stakeholders who will provide input, collaboration and sign-off on deliverables created during this engagement	Schedule impact
During the course of the engagement, MPC will make available stakeholders, functional owners, subject matter experts, design specifications, application code and documentation that will enable Onix	





Networking to conduct and conclude this engagement in a timely manner, congruent with the time line.	
MPC is responsible for the procurement/provisioning of all server hardware or virtual environments necessary for the completion of this project including: migration servers and GADS systems	
MPC will provision a system (physical or virtual) to support the GADS service. Please see "Appendix B: System Requirements" for GADS configuration requirements.	
MPC will provision systems (physical or virtual) for the CloudMigrator migration servers. Please see "Appendix B: System Requirements" for CloudMigrator configuration requirements.	
MPC will configure the Single Sign-On system providing Identity Provider (IdP) services to Google Apps.	Schedule and budget impact
MPC is responsible for the actual data cleansing and appropriate configuration settings of distribution lists.	Schedule and budget impact
MPC is responsible for deploying suitable web browser, i.e. Google Chrome for Business	Schedule and budget impact
MPC to provide a list of calendar resources to be migrated to Google	Impact to schedule

### 10. Fees and Expenses

Delivery of the work will be done according to the terms and conditions of this Agreement. This is a time and materials estimate and the fees will be based on the actual number of hours spent on the engagement by project team personnel extended by the hourly rate where applicable.

The travel and expenses incurred during the engagement are additional, and will be billed back to the customer at cost. Any travel plans and associated costs will be pre-approved and planned according to MPC's travel policy.

The estimated hours of work will be split among the roles mentioned above in the section marked "Project Team." Onix Networking may also assign additional resources in a non-billable capacity, for training purposes or to accelerate work.

Upon commencement of this SOW, a payment of 50% of the total estimated consulting fees is due. Subsequently, Onix Networking will provide a monthly invoice listing hours billed in the previous one month period. All subsequent invoices are due to be paid within thirty (30) days of receipt.

### One-Time Implementation & Consulting Fees (Estimated)

Project Workstream	Hourly/Per Unit Price	Hours	<b>Extended Price</b>
FIOJECT WORKSTIEATH	Hourry/Fer Office	Hours	Exterioed Frice





Project Management	\$185	58	\$10,730
Technical	\$185	120	\$22,200
Training	\$185	54	\$9,990
Communications	\$185	40	\$7,400
Go Live Support	\$185	16	\$2,960
*Estimated Travel Expenses 2 people (MPC			
will be billed at actual cost)			\$1,600
Estimated Services Total	\$185	272	\$54,880.00

### **Pricing Notes:**

- Customer will only be billed for actual services performed.
- Travel Expenses are not included and will be covered by MPC at cost.
- All applicable taxes will be added when invoiced.

### **Annual Onix Google Apps Support Fees**

Support Package	Per User Price	Users	Extended Price
Onix Bronze Level Administrative Support			
(Full-time Faculty/Staff)	\$2	500	\$1,000.00

### **One-time Cloud Technology Solutions License Fees**

Description	Per User Price	Users	Extended Price
CloudMigrator Licenses	\$2	500	\$1,000.00

#### **Total Service and License Fees**

Description	Per User Price	Users	Extended Price
Grand Total	\$185	500	\$56,880.00

#### **Customer Billing Information:**

Purchase Order #:	
Billing Address	
Street 1:	
Street 2:	
City, State:	
Zip Code:	



### Statement of Work Google Apps Implementation for: Monterey Peninsula College Monterey Peninsula



### **Onix Networking** Signature: \_\_\_\_\_ Signature: \_\_\_\_\_ Name: Tim Needles Title: \_\_\_\_\_ Title: President / CEO

### Appendix A: System Requirements

Monterey Peninsula College

Google Apps Directory Sync (GADS)

To view the GADS Administration Guide, please visit - http://goo.gl/9Os2O

#### LDAP servers:

Microsoft Active Directory, Lotus Domino, and most generic Open LDAP servers.

#### Operating systems:

- Windows XP (SP2), Windows 7, Windows Server 2003 / 2008
- Linux
- Solaris (version 8+, no support for x86)

Prerequisites: Read and execute administrative access over to your LDAP server. Experience with LDAP queries and servers.

Cloud Technology Solutions - CloudMigrator





For the CloudMigrator Administration Guide, please visit - <a href="http://goo.gl/VxiSs">http://goo.gl/VxiSs</a>

#### Environment:

- Operating system: Windows XP/Vista/Windows 7/Windows Server 2003/2008 (Clean build recommended)
- Recommended system specification: Minimum specification is flexible, but a recommended configuration is: 2.0Ghz or higher Intel Core 2 (or equivalent); 4GB RAM or higher; 7200RPM hard disk with space according to migration characteristics
- Novell GroupWise 6.5.6 or higher, including archives

The following software must be installed on each migration server:

- Microsoft .NET Framework version 3.5
- GroupWise
  - Novell GroupWise Client 6.5.6 or higher
  - Novell Client 4.91SP4 or higher

Optional (required only if a staged migration is being used)

- Database
  - Microsoft SQL Server 2005/2008 or PostgreSQL Database 8.3 or higher