



Business Driver

The Cloud Based Email and Collaboration (CBEC) Business Case was concluded in October of 2012. During the evaluation conducted as part of CBEC, agencies conducted a review of the functions provided by Lync. There was positive input received regarding the use of this tool.

In the CBEC Business Case one of the identified ***Immediate Next Steps*** was:

Determine whether there is a business case to implement Lync online or on-premise to complement the collaborative features of the Shared Email service.

The Service Inquiry process was identified as the process to follow to review with customer agencies and determine agency interest in this service offering. The Service Inquiry process will be leveraged to assess if CTS should proceed with an on-premises Lync deployment, a cloud based deployment or no deployment.

CTS currently provides a service offering called Live Communication Service. It is based upon a previous version of Lync called Live Communication Service or LCS. CTS was unable to upgrade LCS to the next version of the tool called Office Communicator, or OCS. At the time that OCS was available, it did not pass the Security Design Review and was not compliant with the OCIO Security Standards. CTS has recently been in discussion with the Microsoft vendor team to assess Lync (the next generation to follow OCS) to assess how it could be deployed as an enterprise offering to state agencies. One of the early assessment needs will be to determine if it can be configured in the enterprise and be in compliance with the OCIO Security Standards.

The current LCS service provided by CTS is deployed to approximately 6,000 users across 14 agencies. The features of LCS include instant messaging, presence awareness, document collaboration, audio and video collaboration. CTS is at the point where it needs to assess and map the path forward with Lync and review customer demand for the offering.

The option of considering a cloud based deployment assume: use of Active Directory Federation Services (ADFS) to support authentication, the establishment and management of a tenant for the Enterprise Active Directory (EAD) agencies and consideration of impacts if Lync is in the cloud and the email is on premises.

The benefits to the state are a common tool used by state agencies who have membership in EAD that is integrated with the Shared Services Email offering and integrated with Outlook at the desktop. All agencies would need to confirm their user based licenses to confirm their ability to consume Lync services.



Overview and Potential Benefits

The Lync on premises offering provides a collaboration tool that is integrated with Outlook and Exchange. Information that is created in a collaboration or instant message exchange is natively part of Exchange and as such can be viewed as using the same path for records retention as Exchange created data.

The Lync offering provides presence awareness so that employees know the availability of other employees with whom they wish to communicate. They can establish instant message conversations to speed communication. They can conduct interactive audio or video collaboration meetings “in the moment” or in advance, where participants can talk with one another and view or edit the same material, such as a document or presentation. This can all be done from one desktop to another as opposed to having to travel to a common meeting room. This is especially effective when employees are in different geographic regions and not in the same facility. These collaboration tools are easier to understand and use than in the past. Users can easily move between these communication methods in the same conversation since they are available to users in one place, integrated into Outlook and the desktop experience. With Lync 2013 an increasing amount of this capability will be available on IOS and Android smartphones and tablets.

The assumed deployment would be an upgrade from LCS to Lync software across a set of virtual servers. The system could be configured to be redundant if agencies require that level of function.

CTS would need to consult with the vendor team to map out a deployment approach including:

- Conduct a Design Review to confirm compliance with OCIO Security Standards
- Document design for offering including CTS actions and agency actions (for example, firewall rules, etc to allow deployment across the EAD Forest)
- Deployment model for functionality could be deployed in phases.

CTS assumes that the agencies currently consuming the LCS service would continue to use the new Lync offering. Other agencies who are current Shared Services Email customers would determine their level of interest to become consumers of the Lync service. Agencies who are now planning to migrate to Shared Services Email would also determine their level of interest.

CTS Effort to Deploy and Support:

Work to be completed for on premises deployment:

- Design work and a design review for the project
- Configuring Lync in the EAD Pre-production environment and piloting with a customer agency
- Complete requirements for EAD Schema change for Lync 2013 and update the schema.
- Decommission the current Live Communications Service and remove Active Directory groups from the EAD.



November 28, 2012

- Work with customer agencies to deploy the new Lync client.
- Install and configure Lync 2013 in the EAD., which includes:
 - installing and configuring hardware and Lync 2013 software
 - configuring the SQL instance on the existing Messaging Cluster
 - training staff on Lync 2013 support
 - Working with pilot production agencies
 - working with the customer agencies to set up Lync for their employees
 - Prepare and provide training materials for end users

One note for awareness. We have been advised by the vendor that LCS and Lync cannot coexist on the network. In order to stand up Lync the LCS system will need to be brought down with a one to two week suspension of function while the Lync system is stood up. More details will be obtained and agreed upon in a rollout plan.

Staffing resources necessary for the project would include Design, Project, Server Provisioning, Network, Security, AD, Messaging and SQL subject matter experts.

Estimated Time to Implement: It is estimated it will take approximately 6 months to replace existing functionality to existing customers.

Initial installation would provide IM, Presence, audio and video conferencing, desktop sharing, co-authoring, Whiteboard Sharing, Archiving, Monitoring, Web Access and Mobile and would support approximately 10,000 users.

Deployment:

Support and Maintenance: Support requirements for the Lync 2013 are estimated at an average of 1 hour per day to maintain logs, work with customers on issues and general maintenance and monitoring of the environment. Design assumes high availability by installing in a pool, but not site resiliency at this time. DR would be managed by backup.

Agency Support Responsibilities would include:

EAD Agency tasks would include:

- Installing the new Lync client
- Training staff on new functionality of Lync 2013



- Working closely with CTS on deployment schedule
- Assisting users with exporting contact information if desired

Processes and Custom Templates: Not applicable for this service.

Agency Support Responsibilities:

Agencies are required to review user or device licensing with Microsoft to confirm licensing compliance. Agencies with LCS client code would require Lync client code to desktops.

Agencies must plan for agency firewall configuration changes to support the outcome of the Security Design Review

The RBAC model is not solidified, but is assumed that would be that agencies could add and remove their own users, initiate their own conferences, etc. CTS will manage the servers and initiate an agency's access to Lync 2013 much as they do with Exchange today. The Delegation model will be determined in the detailed design phase of an implementation project.

Client Installation and Troubleshooting: Agencies will sign an SLA, confirm appropriate licensing and become "ready to consume the service. Agencies will provide Tier 1 support to users, just like with SSE.

User Training:

CTS will provide basic user training documentation like was provided by SSE. Agencies can then tailor that training to best meet their agency deployment and training needs. Examples are typically shared within the enterprise so that agencies can take advantage of materials developed by others.

Developing and Testing Custom Templates: N/A in this case.



November 28, 2012

Estimated Cost:

System Cost:

The system would include 2 Front-end Lync 2013 Enterprise Servers and 2 Edge Servers.

2 Virtual Servers to replicate the current service. Servers are installed in the “pool” and the pool is expandable by adding addition VMs. Each virtual can support 5,000 users.

Pool of two Front End Servers: \$1,290 per month to support approximately 10,000 users. Each add server would be \$645.00. One-time charges \$1,788 for both VMs.

2 Edge Servers would be deployed to support mobile and web services for Lync similar to Outlook Web Application.

Two Edge Servers: \$1,250 per month (includes network); One-time costs: \$1,788 for SCOM and setup.

Use existing SQL Messaging Cluster for the database.

Pre-production: 2 VMs: one Edge/one Lync Server \$500 per mth plus one-time setup of \$800 for both.

Server Software:

Lync 2010 R2 Server pricing: 2,583.89 per server (2013 pricing is not available yet).

Windows 2008 R2 is included in the VM price.

Assuming a deployment to support 10,000 users (the existing 6,000 users plus an additional 4,000 users), preliminary estimates for on premises implementation are:

The estimated project resource effort and cost is 737 hours and \$57,656.00.

Project Resource Costs:

Project Manager:	250 hours
Design:	150 hours (includes design, design review, cross agency team)
Network:	8 hours
Security:	36 hours
Storage:	8 hours



November 28, 2012

Server Provisioning: 16 hours
Operations
Active Directory: 24 hours (1 AD SMEs)
IM SME 200 hours
SQL Server: 45 hours

Consulting Costs:

Microsoft Premier: 24 Premier Hours @ \$250 per hour = \$6,000

Support Costs:

Support Costs: 1 hour per day (.125 of an FTE = \$1,492 per month)

Total Cost Estimate: Current fee for LCS is \$.78 per user per month.

Additional Technical Detail:

Consideration of an option to the cloud for deployment would mean additional review with the vendor to confirm assumptions as well as confirming with agencies. Questions to be answered include:

- Is there a business driver to drive to cloud vs on premises? Are there any features that are different based upon deployment approach?
- Assumption is that cloud deployment would have users authenticating using ADFS to use Lync in the cloud
- CTS would need to establish the tenant to support the cloud and review the staffing.
- Assumes conclusion on EA to support the required licensing available to agencies
- Like with the on premises deployment, a review of the OCIO Security compliance will be conducted for cloud offering.