

# Migrating to the *Cloud*

Developing the right Cloud strategy and  
minimising migration risk with Thomas Duryea  
Logicalis' Cloud Services



**Organisations are looking for new ways to deliver IT services and demanding that ICT delivers more with less resources. As a result the traditional data centre has evolved to address these challenges. Cloud services are fast becoming the enabler to meet these business challenges. But how do you get there and how do you do it right?**

As with any IT infrastructure project or architecture, business needs to develop a strategy, assess business and application requirements then carefully plan and execute the solution. Moving to the Cloud is no different; however a cloud methodology is unique to each business. With varying types of cloud such as Public, Private or a mix in a Hybrid Cloud, business needs to adopt an approach that not only meets ever changing business demands but also maintains security and compliance.

The recommended approach to move to the cloud is to use a multi-phase methodology which includes an advisory, an assessment, and a design and implementation phase.

Our cloud services are designed to help you choose and implement the specific cloud solutions that meet your exact needs and objectives, however diverse they are:

1. Cloud Advisory Service
2. Cloud Readiness Assessment
3. Cloud Design and Migration Service



Often, technological solutions are implemented without ensuring the solution meets or aligns with the business requirements. A cloud advisory phase enables an analyst to undertake discovery, audit, analysis and reporting of business initiatives and objectives and aligns them with existing IT architecture principles and internal IT strategy.

**An Advisory phase** ensures Cloud adoption meets business requirements and aids in creating a Cloud adoption strategy.



One of the challenges businesses face when considering an appropriate cloud solution is understanding exactly what their compute requirements are. In many existing private data centres an abundance of resources allows for over-allocation of resources. However, in a cloud you pay for what you use, so it is important that measure your existing compute requirements to maximise the cost benefits of cloud.

**A Readiness Assessment** ensures that applications that have been identified in the cloud strategy are adequately profiled to capture resource requirements in both normal conditions and during peak use times. The Assessment should also investigate and capture disk utilisation and capacity, data retention requirements, high availability and disaster recovery as well as network dependencies



At the end of the Readiness Assessment phase the business should have a matrix of each service clearly defining resource requirements. Having this information captured is critical to ensure the business can evaluate the cloud market and procure the required resources.

Once armed with a cloud strategy and requirements the next phase is **Design and Migration**. To ensure the successful migration of services to the cloud a detailed design and migration strategy needs to be completed. This phase should carefully consider network requirements and connectivity options, application dependencies and migration order and approach. Once the designs are completed the remaining tasks are the execution of the pilot and commissioning of all remaining services.

# 1. Cloud Advisory Service

The key to any successful Cloud implementation is the alignment of business initiatives and objectives with appropriate cloud solutions.

Thomas Duryea Logicalis' cloud services are designed to help you choose and implement the specific cloud solutions that meet your exact needs and objectives, however diverse they are. We recommend a phased approach beginning with a period of discovery and assessment that consists of a review of the existing and planned data centre space requirements and overall IT infrastructure.

The Cloud Advisory Service delivers a Cloud strategy that advises customers on the available choices, likely benefits, constraints and risks for adopting Cloud services. It identifies the future state that covers the consumption of cloud services and develops a roadmap showing the stages to reach the future vision.

- How do I determine what applications are suitable for cloud?
- How do I compare cloud costs to my current enterprise costs?
- What role does Cloud play in my Data Centre strategy?

## Scope

### 1. Identify Cloud Vision

Helps you to answer the question "Why Cloud?" by identifying your vision for the use of cloud services within the organisation.

### 2. Current State Discovery

Identifies your "as is" ICT capability, with data collected describing the services, technology, operating model and supplier agreements to define the baseline for the current operations

### 3. Future State Definition

This model considers the main aspects of the ICT services provisions, identifying the split between on premise and cloud sourced capabilities. The model will identify the degree to which the future vision can be achieved, and the associated risks and major gaps/development areas.

### 4. Roadmap and Recommendations

Develop the proposed roadmap and final report. The roadmap will show a series of activities to progress from the current state to the future state in defined phases. The final report, including the justification of the strategy, linked to the cloud business drivers.

## Deliverables

The Thomas Duryea Logicalis Cloud Advisory Service delivers a comprehensive report delivered by a Cloud consultant that covers:

- Description of your future Cloud vision, with prioritised Cloud drivers
- Current Cloud maturity state, readiness review and future operating model
- Workload placement strategy (including private, public and hybrid)
- Proposed roadmap to deploy recommendations for moving to a Cloud model.

## 2. Cloud Readiness Assessment

The successful migration of services to a Cloud architecture requires an assessment phase. A series of workshops and deployment of automated information gathering tools to evaluate the existing data centre environment and its suitability to move to a Cloud architecture.

The Assessment provides detailed inventory and specifications document that articulates customer's Cloud requirements.

During this phase, Thomas Duryea Logicalis will complete an assessment of the customer's existing data centre and applications to create a specification document that articulates cloud requirements and provide:

- Clarity of Cloud compute requirements or application dependencies
- Strategy for best connecting organisation to Hosted / Public clouds.

<b>Scope</b>	<p><b>Network Review</b></p> <ul style="list-style-type: none"> <li>■ Review customers existing WAN and DC Networking configurations including VLAN's, IP address schemes, firewalls, etc</li> <li>■ Identify connectivity requirements to a Cloud offering from customers network</li> <li>■ Investigate high level connectivity options (including identify changes required to routers, EIGRP, QOS, BGP or static if required)</li> <li>■ Identify Public facing services (SMTP, WWW, VPN etc.) and existing firewall rules</li> </ul> <p><b>Application / Server Review</b></p> <ul style="list-style-type: none"> <li>■ Create an application / server resource profile for all services. For example, identifying vCPU, RAM, IOPS, backup, HA requirements</li> <li>■ Identify servers with static characteristics. For example, physical dongles, serial adapters, hard coded MAC addresses for software licensing</li> <li>■ Analyse storage requirements, size and tiers of storage (standard, premium) thin provisioned vs full</li> <li>■ OS types and Microsoft licence review</li> </ul>
<b>Deliverables</b>	<p>On completion of the activities Thomas Duryea Logicalis will create a specification document, which includes but not limited to the following:</p> <ul style="list-style-type: none"> <li>■ High-level network requirements for connecting customer to a Cloud</li> <li>■ Documented Application / Server resource profiles including storage requirements</li> <li>■ Microsoft License report</li> <li>■ Identified risks and issues.</li> </ul>

### 3. Cloud Design and Migration

The successful migration or implementation of services to a cloud architecture requires a planning phase.

During this phase, Thomas Duryea Logicalis will complete a detailed assessment of a customer's existing Network, Data Centre and Application environment and create a series of detailed design documents that articulate detailed network, application migration and implementation processes.

A series of workshops gathers the detail to develop a design and migration strategy. A pilot phase followed by the implementation of production systems.

- Understanding of the steps to migrate their workloads to the Cloud
- Provides house technical capability to perform the workload migrations to the Cloud creating a consistent user experience when accessing corporate data and applications

<b>Scope</b>	<p><b>Network Design</b></p> <ul style="list-style-type: none"> <li>■ Detailed planning and design of existing WAN and DC Networking configurations including the VLANs, IP addressing schemes, etc.</li> <li>■ Detailed network connectivity design (including required changes to routers, EIGRP, QOS, BGP or static if required)</li> <li>■ Design of Public facing services (SMTP, WWW, VPN etc.) and firewall rules</li> </ul> <p><b>Application / Server Review</b></p> <ul style="list-style-type: none"> <li>■ Detailed design of application environment with categorisation into the following: <ul style="list-style-type: none"> <li>▪ No Migration - Servers being decommissioned, legacy or not to be migrated to the Cloud</li> <li>▪ Virtual Server Migration - Servers to be migrated to the Cloud</li> <li>▪ Server Rebuild - Physical servers where a P2V conversion is not practical, Active Directory Domain controllers, etc.</li> </ul> </li> <li>■ Creation of a detailed application / server resource profile including application dependency mapping and the confirmation of all services.</li> <li>■ Determine Detailed Migration strategy for each identified service group, and associated migration profiles (including identification of a pilot service and commissioning schedule of remaining production services)</li> <li>■ Identify application testing requirements and responsibilities.</li> </ul>
<b>Deliverables</b>	<p>On completion of the activities Thomas Duryea Logicalis will create a series of detailed design documents, which includes but not limited to the following:</p> <ul style="list-style-type: none"> <li>■ Detailed network design for connecting customer to the Cloud</li> <li>■ Detailed Application / Server migration strategy</li> <li>■ Network and Server as built documentation</li> </ul>