Smashing the Barriers to Adoption of Enterprise Cloud Computing

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Vice President
Global Customer Advisory

February 2009
What’s Driving IT to a New Approach?

**Market Forces**
- The Economy
- Anytime, anywhere IT
- IT as strategic enabler
- Tectonic shift in technology
- The Environment (Green)

**Business Forces**
- Defer and avoid costs
- Fix the IT bottleneck
- Map supply and demand more effectively
- De-capitalize IT
- Automate Operations

Perceived barriers to a new approach

**Public Cloud**
- Security
- Compliance
- Application Rewrites

**Private Cloud**
- Existing investments
- Labor intensive, steep learning curve
- Skeptical about results
Cloud computing is an approach that enables organizations to leverage scalable, elastic and secure resources as services with the expected results of simplified operations, significant savings in cost and nearly instant provisioning.

The key attributes “usually” associated with Cloud Computing

1. **Multi-tenant** – the ability to process the needs of multiple users with shared resources in a dynamic and transparent fashion
2. **Elastic and Scalable** – resources can expand and contract as needed
3. **Metered/Rented** – some manner of “pay for only what you use”
4. **Self-Provisioned** – “self check-in” at least to some degree
5. **Internet based** – accessible using internet technology, usually over the public Internet
6. **X as a Service** – the details/concerns of implementation are abstracted for the customer

The seventh attribute sets **Secure** cloud computing apart

7. **Secure** – an overall decrease in risk due to greater security protocols and tools from the cloud provider for data in motion, data at rest and data in process.
Why the Sudden Interest?

Gartner’s 10 Strategic Technologies for 2009

1. Virtualization *(Ranked No. 5 last year)*
2. Cloud computing *(New to the list)*
3. Computing fabrics *(No. 8 last year)*
4. Web-oriented architecture *(New but similar to “the Web platform” No. 7 last year)*
5. Enterprise mashups *(No. 6 last year)*
6. Specialized systems *(New to the list)*
7. Social software and social networking *(No. 10 last year)*
8. Unified communications
9. Business intelligence *(New)*
10. Green IT *(No. 1 last year)*

Cloud Computing is generating significant interest due to the confluence of emerging Cloudware technology and the drive to minimize additional capital expenditures on data centers and infrastructure.


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The Key Business Driver for Cloud

Agility

Extreme Automation  Self-service capability  Ready-to-go
The Financial Benefits of Cloud Go Beyond Capital Expenditure

<table>
<thead>
<tr>
<th>Financial Perspective</th>
<th>Traditional Data Center</th>
<th>Cloud Computing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure type</td>
<td>Capital expenditure (capex) Operating expense (opex)</td>
<td>Operating expense (opex)</td>
</tr>
<tr>
<td>Cash flow</td>
<td>Servers and software are purchased upfront</td>
<td>Payments are made as the service is provided.</td>
</tr>
<tr>
<td>Financial risk</td>
<td>Entire financial risk is taken upfront, with uncertain return.</td>
<td>Financial risk is taken monthly and is matched to return.</td>
</tr>
<tr>
<td>Income statement</td>
<td>Maintenance and depreciated capital expense</td>
<td>Maintenance expense only</td>
</tr>
<tr>
<td>Balance sheet</td>
<td>Software and hardware are carried as a long-term capital asset.</td>
<td>Nothing appears on the balance sheet.</td>
</tr>
</tbody>
</table>


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How Cloud is Typically Used Today

This is relative, not definitive positioning

Cloud

Mail and Collaboration

Analytics and Reporting

Web

Software Development/Test

Traditional

Conventional business applications with:
- Patient Data
- Employee Information
- Financial Information
- Customer Information
- Government

Routine Applications

Business Applications

Critical Applications

Document Management

Financials and Planning

DR

Mission Critical/OLTP

Security Requirements

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Survey #1: What is Your Greatest Concern About Moving Workloads to the Cloud?

- 72% cited SECURITY concerns
- 34% selected Integration issues
- 14% cited TCO
- 8% none of the above

Results from 90 respondents, Unisys online survey taken 25 June 2009, Webinar - Cloud Computing Security: Protecting your Data in the Cloud

More than one choice selected thus total exceeds 100%
Survey #2: What Do You See as Your Greatest Barrier to Moving to Cloud?

- 51% cited SECURITY/Data Privacy concerns
- 21% selected Integration of cloud-based applications with existing systems
- 18% cited Bring systems back in-house
- 10% selected Regulatory/Compliance issues

Results from 312 respondents,

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Survey #3: What Concerns Do You Have About Moving to the Cloud for IT Service?

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECURITY</td>
<td>83%</td>
</tr>
<tr>
<td>What to put in the cloud</td>
<td>9%</td>
</tr>
<tr>
<td>How to transform to the cloud</td>
<td>6%</td>
</tr>
<tr>
<td>Internal or External cloud</td>
<td>2%</td>
</tr>
</tbody>
</table>

Results from 272 respondents, Unisys survey on sys-con.com; results as of October 13, 2009
Security is #1
Why Security is a Top Concern
Do you worry about…

- Securing your data outside your firewall?
- Unauthorized visibility to your data when in a shared computing environment?
- Unintentional cloud administration errors?
  - Providing unauthorized access/rights to others
  - Causing your data to go to other organizations, customers, or competitors
- Potential breach of the virtualization hypervisor (i.e. virus)?

Compliance
- The cloud provider’s auditing procedures?
- The cloud provider’s ability to help you meet your regulatory and compliance requirements?

What if these concerns were eliminated and your cloud was really secure?
Secure + Private Clouds = More Options

This is relative, not definitive positioning

Secure Cloud

Private Cloud

Traditional

Security Requirements

HIGH

LOW

Routine Applications

Business Applications

Critical Applications

Mail and Collaboration

Analytics and Reporting

Web

Software Development/Test

Conventional business applications with:
- Patient Data
- Employee Information
- Financial Information
- Customer Information
- Government

Document Management

Financials and Planning

DR

Mission Critical/OLTP

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Considerations to Weigh

This is relative, not definitive positioning

<table>
<thead>
<tr>
<th>Security Requirements</th>
<th>Risk Tolerance</th>
<th>Cyclical Workloads</th>
<th>Payment Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>• Patient Data</td>
<td>• Government</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employee Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Routine Applications
- Business Applications
- Critical Applications

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Assessing the Transformation

1. Business Drivers
   - Modernize?
   - Existing Application?
   - New Application?

2. Key Client Considerations
   - Security & Compliance?
   - Cyclical Workloads?
   - Network Latency?
   - Relative Costs?
   - Will My Applications Run?
   - Business Continuity?

3. Client Deployment Options
   - Traditional IT
   - Private Cloud
   - Public Cloud
How is Unisys Tackling Enterprise Cloud???
Unisys Areas of Strength Play to a New Approach to IT

Data Center Transformation and Outsourcing

We help you transform your data centers and make the right IT sourcing decisions. We do this by leveraging our transformational services and outsourcing capabilities to help you achieve maximum return, and make your operations more agile, secure and efficient while lowering your overall costs.

End User Outsourcing and Support Services

Anywhere, anytime secure support for your hardware and software needs with measurable cost reductions, improved satisfaction and faster incident resolution. With 31 ITO Operations Centers with multi-language capabilities and global ITIL-based Resolution Optimization Model, ISO-certified global logistics network and remote infrastructure management with last mile delivery capabilities in over 100 countries.

Security

Unisys has tackled some of the toughest security challenges in the world for both public and private sector clients. We bring an holistic approach to security that spans digital and physical environments, securing your people, places, assets and data.

Application Modernization and Outsourcing

Unisys Application Services helps you minimize the risk of change by anticipating roadblocks while enabling better alignment to business needs – and creating an efficient interface between your business and IT.
Unisys Plan for Delivering Secure IT Services in the Cloud

1. **Data Center Transformation**
   Delivering profound business results through Data Center transformation
   *Available now*

2. **Unisys Secure Cloud Solution**
   Extremely Secure Cloud Computing
   *Available now*
   - Secure IaaS
   - Secure PaaS
   - Secure SaaS
   - My Secure AaaS
   - Secure DRaaS
   Cloud security powered by *Unisys Stealth*

3. **Unisys Secure Private Cloud Solution**
   All the advantages of Cloud Computing – internally
   *Available December 2009*

4. **Hybrid Cloud**
   Combining the best of Internal and External Cloud for maximum agility, elasticity and security, at minimum cost
   *Available Q1 2010*

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Unisys Secure Cloud Solution: Managed End-to-End, Anytime, Anywhere

Secure Infrastructure as a Service (IaaS)
- c-RIM Service Desk & Server Management
- Provisioning virtual and physical servers, scale-up or scale-out

Secure Platform as a Service (PaaS)
- One click selection of platform, web, application, and database servers
- Automated middleware application management with c-RIM Enterprise Management Service
- Sun Java™ stack

Secure Software as a Service (SaaS)
- Secure Document Delivery Service
  - Secured documents for electronic delivery directly into clients’ e-mail inbox
- Secure Unified Communication as a Service
  - Cloud-based e-mail, SharePoint and Office Communication Services
- Secure Virtual Office as a Service
  - Hosted desktop via Secure Cloud with centralized control and management

My Secure Application as a Service
- Provisioning and de-provisioning of your multi-tiered application on our PaaS platform

Subscription-based Pricing
Unisys Secure Cloud Solution: What’s New – November 2009

**Secure Infrastructure as a Service (IaaS)**
- c-RIM Service Desk & Server Management
- Provisioning virtual and physical servers, scale-up or scale-out

**Secure Platform as a Service (PaaS)**
- One click selection of platform, web, application, and database servers
- Automated middleware application management with c-RIM Enterprise Management Service
- Sun Java™ stack
- **Microsoft stack**: IIS web server, .Net application server, SQL Server
- **Custom stacks** (IBM WebSphere, Oracle, etc.)

**My Secure Application as a Service**
- Provisioning and de-provisioning of your multi-tiered application on our PaaS platform

**Secure Software as a Service (SaaS)**

**Secure Document Delivery Service**
- Secured documents for electronic delivery directly into clients’ e-mail inbox

**Secure Unified Communication as a Service**
- Cloud-based e-mail, SharePoint and Office Communication Services

**Secure Virtual Office as a Service**
- Hosted desktop via Secure Cloud with centralized control and management
- **Qualified client-supplied devices now supported**

**Secure Disaster Recovery as a Service**
- Database replication: configure the secure cloud environment as a Disaster Recovery Backup
Addressing Your Global Compliance Requirements
<table>
<thead>
<tr>
<th><strong>The Unisys Difference</strong></th>
<th>Patent-pending <strong>Stealth</strong> technology that allows private communities of interest based on FIPS 140-2, 256-bit AES encryption and cloaks the data with proprietary “bit splitting”.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Security Best Practices</strong></td>
<td>Layered multi-vendor approach to security with Intrusion Detection and Prevention Services (IDPS), firewall management, 24x7 security monitoring, advanced correlation and analytics, auditable logs…</td>
</tr>
<tr>
<td><strong>Operational Maturity</strong></td>
<td>Secure Cloud services team operates <strong>ISO 20000-certified delivery processes</strong> that are ITIL V3-compliant.</td>
</tr>
<tr>
<td><strong>Independently Certified Security Program</strong></td>
<td>Secure Cloud services are provided from <strong>ISO 27001-certified delivery centers</strong>.</td>
</tr>
<tr>
<td><strong>Independently Audited and Certified Services Centers</strong></td>
<td><strong>SAS-70 Type II-certified</strong> data centers.</td>
</tr>
</tbody>
</table>

*Advanced Encryption Standard*
Unisys Stealth Solution for Network secures data-in-motion for LAN, WAN and wireless networks – available now

- Stealth technology:
  - “cloaks” data and devices from unauthorized access, e.g. sniffers
  - secures data within client-defined community of interest

Stealth solution for storage secures SAN data-at-rest – planned Q1 2010

- Stealth technology:
  - goes beyond encryption, dispersing storage across virtual disk, local or remote
  - secures data within client-defined community of interest

Benefits:
- Protects the confidentiality and integrity of data-in-motion and data-at-rest
- Eliminates the need to modify applications, or to web-enable them for the cloud
- Easily deployed, dramatically simplifies IT infrastructure, resulting in lower costs
- Establishes verifiable chain of custody for your data
Today’s Challenges with Securing a Cloud Service

Must web-enable applications

Bottom Line

• More expensive: For client and Cloud provider
• In-elastic: Unique solution for each application / client
• Impractical: Takes significant time and cost to set up and maintain
In Contrast: Stealth Secures and Simplifies

- Stealth Secures and Simplifies Typical Cloud Facility

Stealth Protected
All data in blue is safe

Unisys Data Center

- A Virtual Web Server
- B Virtual Web Server
- A Virtual App Server
- B Virtual App Server
- A Virtual DB Server
- B Virtual DB Server

Stealth Storage Appliance
SAN

Bottom Line

- More secure and less expensive, multi-tenant
- Simpler, standardized, and much more elastic

No need to change the application
Foundation for Building a Cost-effective Secure Cloud

Provide self-service access to software and server provisioning and ITSM support

Secure Cloudware Stack

Security

Implement Stealth DIM* and DAR* security to provide effective isolation

Service Management

Implement robust ITIL-based service management through automation

Provisioning

Fully automate provisioning (virtual, physical), configuration and compliance management of virtual software and “personas”

Virtualization

Fully virtualize the server and storage resources to provide flexibility and scalability

A server/storage farm populated with both scale-up and scale-out servers.

*Data in Motion (DIM); Data at Rest (DAR)
A Secure Stack for Multi-Tiered Applications:
Dynamic Scalability, Rapid Repurposing, and Process Automation

Provide self-service access to software and server provisioning and ITSM support

Secure Cloudware Stack

Security
Unisys Stealth Solution for Network
Unisys Stealth solution for storage

Service Management
Unisys Converged Remote Infrastructure Management (C-RIM);
Unisys uChargeback™ software; Unisys uGovern™ software*

Provisioning
Unisys uOrchestrate™ software; predefined Runbooks.
Unisys uProvision™ software

Virtualization
VMware®, Windows®
Unisys uAdapt™ software

Unisys Enterprise Servers using Intel® Xeon® 7400 series processors, EMC® storage, etc.

*Available Q1 2010
What is Private Cloud Computing?

Cloud computing is an approach that enables organizations to leverage scalable, elastic and secure resources as services with the expected results of simplified operations, significant savings in cost and nearly instant provisioning.

The key attributes “usually” associated with Cloud Computing

1. Multi-tenant – the ability to process the needs of multiple users with shared resources in a dynamic and transparent fashion
2. Elastic and Scalable – resources can expand and contract as needed
3. Metered/Rented – some manner of “pay for only what you use”
4. Self-Provisioned – “self check-in” at least to some degree
5. Internet based – accessible using internet technology, usually over the public Internet
6. X as a Service – the details/concerns of implementation are abstracted for the customer

A seventh attribute sets Secure cloud computing apart
7. Secure – an overall decrease in risk due to greater security protocols and tools from the cloud provider for data in motion, data at rest and data in process.

Private cloud computing delivers self-provisioned and automated IT capabilities as services to internal users on an immediate and as-needed basis.
Unisys Secure Cloud Solution Now Available for the Private Cloud

Self-service portal speeds provisioning

Secure Cloudware Stack

Security

Optional Stealth security solution provides effective, multi-tenant isolation

Service Management

Greatest number of management options – in-house or by Unisys – enabling visibility to your Cloud resources

Provisioning

Fully automated provisioning frees up IT resources

Virtualization

Fully virtualizes the server and storage resources to provide flexibility and scalability

A server/storage farm populated with both scale-up and scale-out servers: clients or Unisys.

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Unisys Secure Private Cloud Solution
Innovation for Your Internal Data Centers

Benefits

- Automated Provisioning
- Metering & Usage
- Service Management and Operations

Your Cloud Infrastructure
Your qualified assets or Unisys hardware (IaaS & PaaS)
Virtualized & Non-Virtualized / Scale Up & Scale Out
## Unisys “Walks the Walk”

<table>
<thead>
<tr>
<th>Request Type</th>
<th># per Year</th>
<th>Before Provisioning Time</th>
<th>After Provisioning Time</th>
<th>Before Resources</th>
<th>After Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server &amp; Desktop Virtualization</td>
<td>~700/`200</td>
<td>10+ Days</td>
<td>5 minutes</td>
<td>3 with projection of doubling every year</td>
<td>95% of requests require 0 people resources, other 5% is 2 Offshore</td>
</tr>
<tr>
<td>Standard Physical Configurations</td>
<td>~250</td>
<td>15+ Days</td>
<td>20 minutes</td>
<td>9 with projection of doubling next year</td>
<td>2 Offshore</td>
</tr>
<tr>
<td>Custom Physical Configurations</td>
<td>~200</td>
<td>20+ Days</td>
<td>2-3 days</td>
<td>Same resources as above</td>
<td>5 with flat future head count</td>
</tr>
</tbody>
</table>
## Advisory and Assessment

### Strategic
- Understand strategic implications that cloud might have for your business.
- Explore alternatives such as internal or private, external or public, or hybrid clouds and how a client might gain value from internally optimizing their processes and infrastructure based on the Unisys vision for a Real-Time Infrastructure (RTI).

### Cloud Feasibility & Workload Assessment
- Examines the characteristics of business services that have sub-components with the potential to be moved to the cloud, and what positive impacts would be realized.
- Assesses the readiness of the client’s infrastructure to support the consumption of a cloud IT delivery model.
Standardized Infrastructure Footprints
The Current Environment

- Many Current Datacenters are built around the concept of standardizing 3 levels of infrastructure footprints – This leads to missed SLAs and Wasted Resources.

- Since all of the resources are co-located in the datacenter the connections are also standardized.
Fit-for-Purpose℠ Design
Understanding Workloads

- Workloads fit in to a number of architectural patterns. Each pattern has optimized hardware and software solutions that support it.

- Running solutions on optimized hardware allows for optimal costs, increased consumer experience, and minimal resource waste.
• Identification of workloads needs to come from an understanding of the business.
  – Break the Business in to its Value Chain Functions and Sub-Functions.
  – Understand the workloads that each Sub-Function utilizes to be effective.
  – Model these workloads and the requirements placed on them.
Legacy Approach

IT Waste & Overspending

Supply Driven

Characterized by:
- 2 Servers with 4 processors each
- Redundant network and SAN connections
- 300 GBs of SAN storage
- 16 GBs of RAM
- 24x7x365 Availability

Functional Capabilities

Mass Produce

Characterized by:
- 8 Servers with 2 processors each
- Redundant network connections
- 100 GBs of DAS
- 4 GBs of RAM
- 24x7x365 Availability

Technical Capabilities

Patterns

Hub & Spoke

N-Tier (WS/AS/DB)

Result

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Demand Driven Approach
Fit-for-Purpose℠ Tailored Infrastructure Services

Characterized by:
- Specialized High Quality Visualization
- Highly Collaborative User Interactions
- Integration of specialized Multi-Media Devices
- Fluid Laboratory Requirements
- 24 hour availability for distributed global workforce

Characterized by:
- Data Aggregation and Transformation of many sources
- Continuous Heavy Disk, Memory Usage
- Sporadic Heavy Network Utilization due to large file movements
- Workflow with Simultaneous Versions
- Medium security (machine to trusted machine)

Result
There are three ways to optimize the cloud architecture:

- **Internal Deployment** – An application with an internal deployment has all of its component workloads in the datacenter.

- **External Deployment** – An application with an external deployment has all of its component workloads in an external cloud.

- **Hybrid Deployment** – An application with some workloads in the datacenter and some in the external cloud.
Critical Steps to achieve “elastic datacenters in the cloud”

Educate & Energize the Enterprise
- Enterprise Cloud Awareness unWorkshop
- Modernization Benchmark

Determine how the Cloud can be used
- Enterprise Cloud Feasibility Analysis
- Business Workload Decomposition Service

Build a Strategy & Design
- Enterprise Cloud Business Case and Value Engineering Service
- Total Cost of Ownership Modeling Exercise
- Cloud Readiness & Strategic Roadmap Service

Enterprise Adoption Service
- Cloud Adoption Services
- Cloud Transition Services
- Enterprise Cloud PoC Services

IT Efficiency

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Additional Material
Unisys Announces Cloud Strategy and Offerings

Unisys Moves to Break Through Barriers to Adoption of Cloud Computing

New strategy combines innovative security with expanded clients’ options for delivery of services in the cloud.

BLUE BELL, Pa., June 30, 2009—Unisys Corporation (NYSE: UIS) today announced a new cloud strategy that addresses concerns about security of data in the cloud, cited by organizations as an impediment to adopting cloud computing for business needs.

Unisys unveiled an innovative cloud computing strategy and solutions enterprise application workloads securely to tailored cloud environments while maintaining the integrity of critical information.

"I believe that cloud computing will revolutionize the way enterprises do business and change the kind of payback they get from their IT investments," said Robert Pyle, Senior Vice President, Systems and Technology. "Our clients tell us that they see great value in the ability to move data to the cloud. However, they have lacked the comprehensive cloud services they need to do so.

Unisys Delivers Secure Cloud Solution, Expanding CIOs’ Options for Moving Application Workloads to the Cloud

BLUE BELL, Pa., August 3, 2009—Unisys Corporation (NYSE: UIS) today announced that the Unisys Secure Cloud Solution became available to clients on July 31. This innovative solution enables enterprise clients to securely move conventional business applications—including those with secure or sensitive data, such as human resources, financial, customer and healthcare information—into a managed, shared cloud service without costly, time-consuming rewrites or other alterations.

The Unisys Secure Cloud Solution is a core component of Unisys cloud computing strategy, which enables clients to choose the type of data center computing services that best meet their business objectives, from self-managed private clouds to Unisys-managed cloud services as well as hybrid solutions.

"With its advanced data protection and network security features, the Unisys Secure Cloud Solution takes a crucial extra step to give clients greater confidence in moving more of their applications with sensitive data to the cloud," said Surya Gupta, Senior Vice President, Cloud Computing and Infrastructure Services for Unisys.

Unisys delivers its cloud computing services through its cloud enablement center, which provides clients with a comprehensive array of cloud services, including cloud strategy development, cloud solution design, cloud service deployment, cloud service management and cloud service optimization.
Unisys Can Help You With Your Journey

From Data Center Transformation to Cloud Service Offerings

Business Impact

- Ability of IT function to help create business process advantage

High
- Manage Service Levels
- Secure “IT as a Service”

Process and Cultural Changes

- Standardize, Consolidate, Virtualize
- Automate technology to improve delivery and meet service levels
- Business “performance-enabled” applications
- Location-independent secure operations

Reduce Costs
- Improve Delivery

Supported with Standardized, Integrated Global Delivery
Cloud Computing Options

Public Cloud
- Rented services
- Multi-tenancy
- Self-service

Private Cloud
- Automation
- Virtualization
- Traditional data center

Optimized Workloads

Hybrid Cloud
Typical Cloud Services Delivered

Accessing the cloud is about renting X as a Service (XaaS)

**SaaS**  
Software as a Service  
Renting execution of software solutions over the Internet (e.g., salesforce.com)

**PaaS**  
Platform as a Service  
Renting use of an application environment over the Internet (e.g., Google App Engine)

**IaaS**  
Infrastructure as a Service  
Renting use of computing power or storage over the Internet (e.g., Amazon’s EC2 & S3)

Each successive service delivers a greater portion of the overall solution as part of the “rented” bundle.
Data Center Transformation and Outsourcing Experience and Innovation

<table>
<thead>
<tr>
<th>Experience</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Decades of experience and expertise</td>
<td>• Thousands of Outsourcing clients in 100+ countries</td>
</tr>
<tr>
<td>• Large-scale, high availability, high transaction volume – our heritage</td>
<td>• Industry-recognized leader in IT Outsourcing</td>
</tr>
<tr>
<td>• Unisys Real-time Infrastructure technology: powers the cloud</td>
<td>• Scalable, integrated, repeatable, global delivery model</td>
</tr>
<tr>
<td>• Time to value, unique visibility</td>
<td>• Robust portfolio and roadmap tracks to the client’s IT maturity</td>
</tr>
<tr>
<td>• tools to assess, plan, model, and select the best transformation projects</td>
<td>• Optimized support model with end-to-end view</td>
</tr>
<tr>
<td>• long-term view and quick, high value, low risk projects with defined cost/risk</td>
<td>➢ ITIL-based processes linking all support levels: self-help and levels 1, 2, 3</td>
</tr>
</tbody>
</table>

Unisys Stealth – transformational security

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Element Virtualization

plus Real-Time Infrastructure

- Build & Manage
- Automated Policy Enforcement
- Orchestration/Workflow
- Re-purposing
- Resource Utilization

- Element Virtualization
- Server Virtualization
- Network Virtualization
- Storage Virtualization
- Client Virtualization
- Application Virtualization

Servers | Network | Storage | Apps

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Real-Time Infrastructure plus Secure Cloud

X as a Service

Web Platform

Application Platform

Database Platform

Build & Manage
Unisys uProvision

Automated Policy Enforcement
Unisys uGovern

Orchestration/Workflow
Unisys uOrchestrate

Resource Utilization
Unisys uChargeback

Re-purposing
Unisys uAdapt

IT Framework (e.g. ITIL)

Element Virtualization

Client Virtualization

Server Virtualization

Network Virtualization

Application Virtualization

Storage Virtualization

Servers

Network

Storage

Apps

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# Unisys Cloud Transformation Services

<table>
<thead>
<tr>
<th>Advisory and Assessment Services</th>
<th>Planning and Design Services</th>
<th>Implementation Services</th>
<th>Migration Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Create awareness</td>
<td>• Create design for the transformed infrastructure including technologies, operations, and security</td>
<td>• Deploy and configure cloud technologies</td>
<td>• Migrate and consolidate applications on cloud infrastructure</td>
</tr>
<tr>
<td>• Analyze feasibility</td>
<td>• Create alignment with current technology, operations, and security</td>
<td>• Integrate existing infrastructure with cloud</td>
<td>• Transform existing infrastructure into cloud infrastructure</td>
</tr>
<tr>
<td>• Create business case and value model</td>
<td>• Fast track the adoption</td>
<td>• Develop transformation plans for infrastructure deployment and application migration</td>
<td></td>
</tr>
<tr>
<td>• Create alignment with current technology, operations, and security</td>
<td>• Identify candidate transformation areas based on application workload</td>
<td>• Integrate operations with cloud (e.g. c-RIM)</td>
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<td>• Fast track the adoption</td>
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