



กรณีศึกษาการพัฒนาารัฐบาล
อิเล็กทรอนิกส์ ในส่วน
ภาคเอกชน ที่ให้บริการภาครัฐ

IT Outsourcing Management

Surak Thammarak

Advisory Systems Engineer

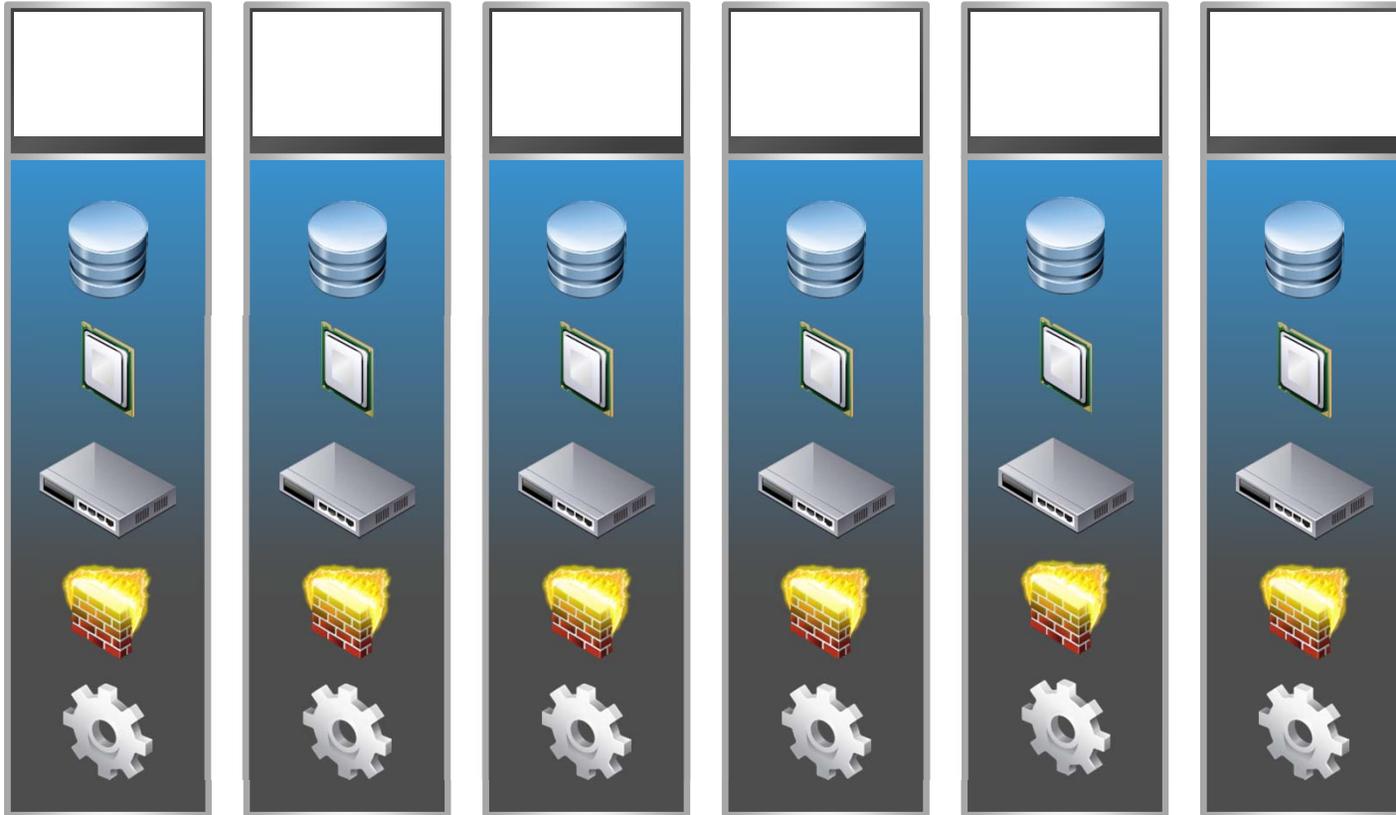
EMC – Thailand

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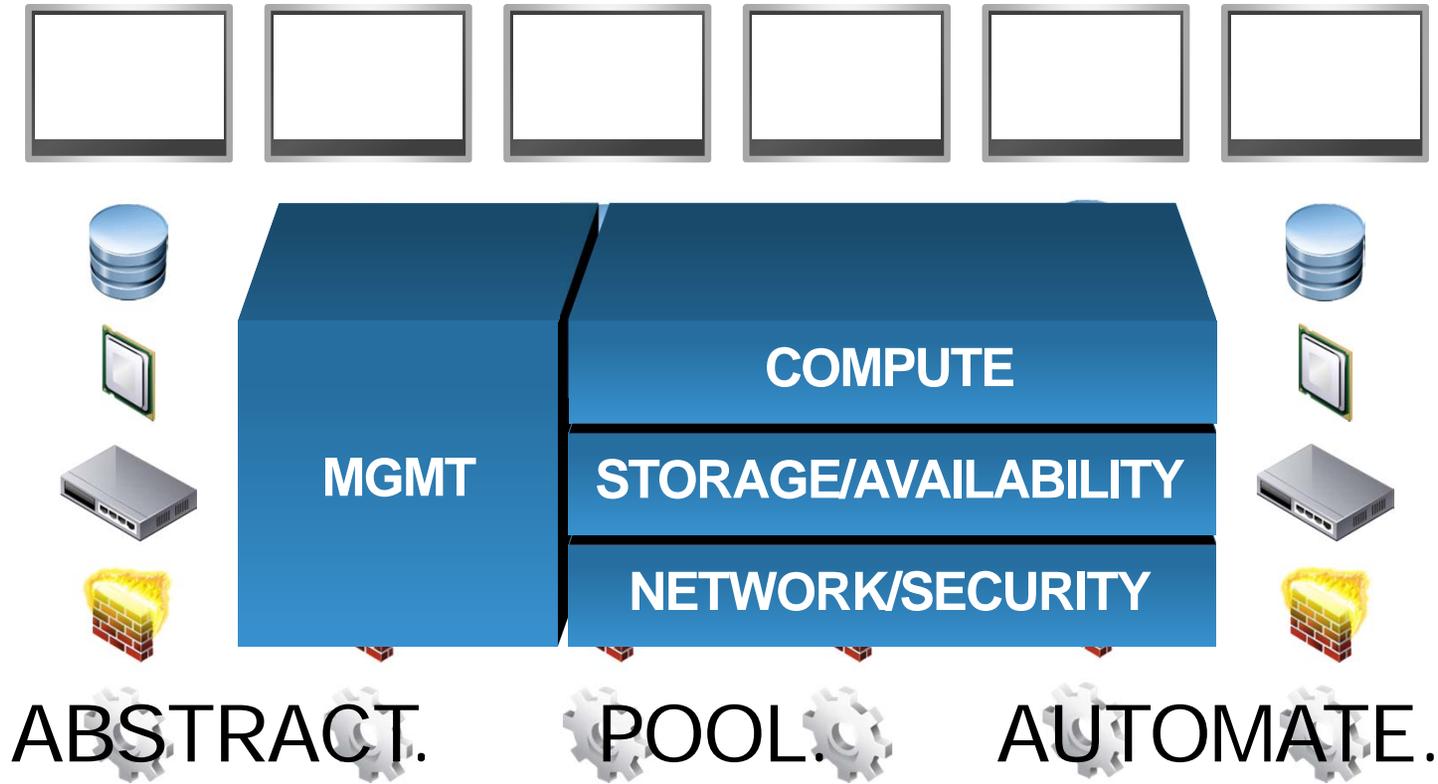
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IT is being **transformed**

Traditional Designs: Silos In The Data Center



Next Gen: The Software Defined Data Center



EMC's

IT Transformation

Before
(2004)

24,000 

960TB 

15%
Virtualized


90

App Provisioning

80%
Maintenance \$

Before
(2004)

24,000 

960TB 

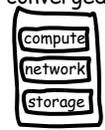
15%
Virtualized


App Provisioning

80%
Maintenance \$

Infrastructure

X86
+
VMware
Standardized
+ Virtualized

converged

Re-platformed


Private Cloud

Before
(2004)

24,000 

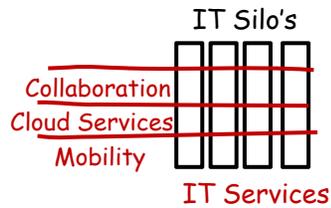
960TB 

15%
Virtualized


App Provisioning

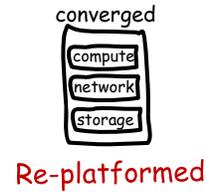
80%
Maintenance \$

Operating
Model (IaaS)



Chargeback

Infrastructure



Before
(2004)

24,000 

960TB 

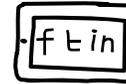
15%
Virtualized


App Provisioning

80%
Maintenance \$

Applications

SFDC
SAP
PROPEL

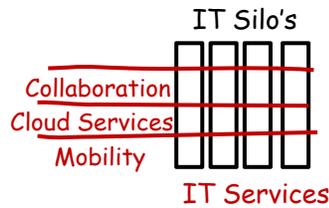


Cloud Applications

Workloads

Social & Mobile

Operating Model (IaaS)



Self Service

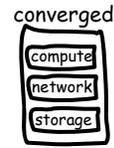


Chargeback

Infrastructure

X86
+
VMware

Standardized
+ Virtualized



Re-platformed



Private Cloud

Before
(2004)

24,000 

960TB 

15%
Virtualized


90
App Provisioning

80%
Maintenance \$

Applications

SFDC
SAP
PROPEL

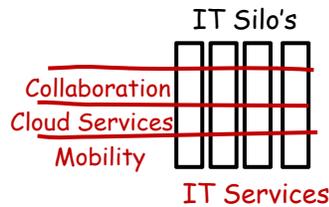


Cloud Applications

Workloads

Social & Mobile

Operating Model (Itaas)



- Metering
- Reporting

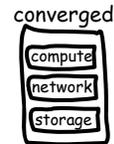


Self Service

Chargeback

Infrastructure

X86 + VMware
Standardized + Virtualized



Re-platformed



Private Cloud



\$157M Capex

\$66M Opex

After
(2013)

60,000 

13PB 

93%
Virtualized


1
App provisioning

58%
Maintenance \$

How to success to create the IT Project in next generation?

- Government & IT Providers partner together in driving IT Strategic roadmap
 - Collaborate within organization (กรม กอง ฝ่าย)
 - Find the Challenges
 - Develop 5 Years IT strategic roadmap
- Focus more in **“Request for Proposal”** NOT **“Term of Reference”**
- Focus more in **“Scope of Work”** to make sure that we can delivers successful and meet objective of project.

CASE Study #1

Government Banking in Thailand

5 Years Roadmap

Infrastructure Roadmap



Agenda

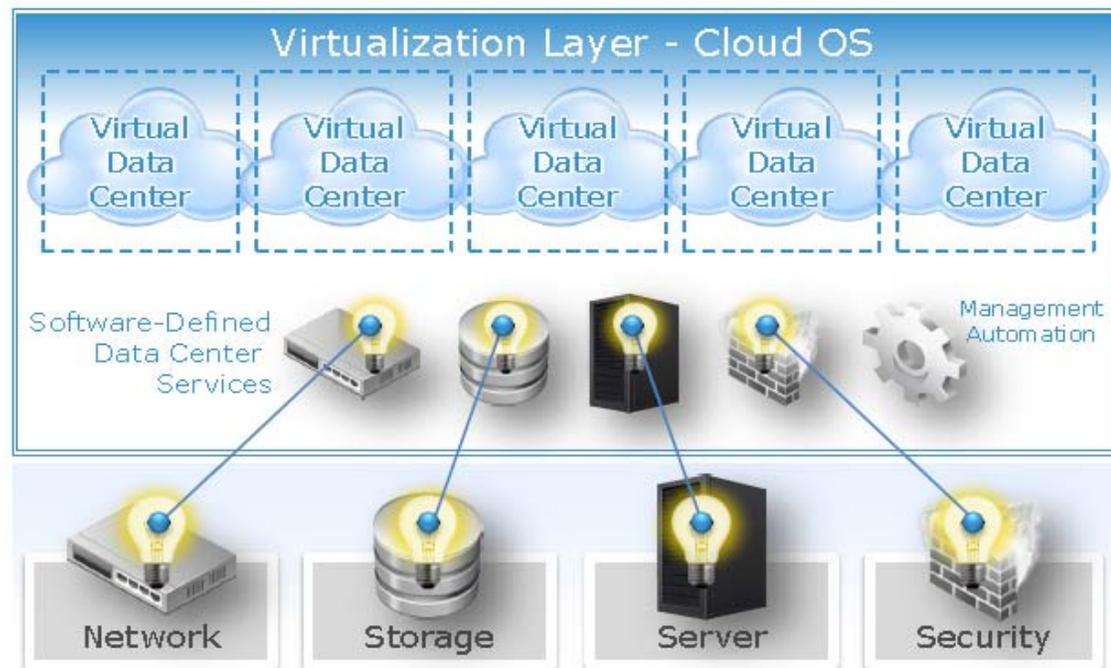
- GAP Analysis
- Transformation Roadmap
- Implementation Plan

Gap Analysis

- As-Is State Versus SDDC

The Software-Defined Data Center

Target State for Transformation



Key Benefits and Attributes of SDDC

Efficient

- Pooled infrastructure resources
- Highly virtualized

Control

- High degrees of standardization and automation
- End-to-end orchestration via software

Choice

- Control plane abstraction provides integration with all suitable hardware
- Standard API based integration

Trusted

- Availability and Performance assurance
- Policy driven Security management

Key Gaps – Towards SDDC

Infrastructure Efficiency

- ~44% of storage capacity sits in isolated islands directly attached to server.
- Slightly more than half of the x86-based production systems are still deployed directly on physical servers.

Availability & Performance

- Lack of Disaster Recovery capabilities that protect against disruption affecting Bangkok area.
- Performance Assurance

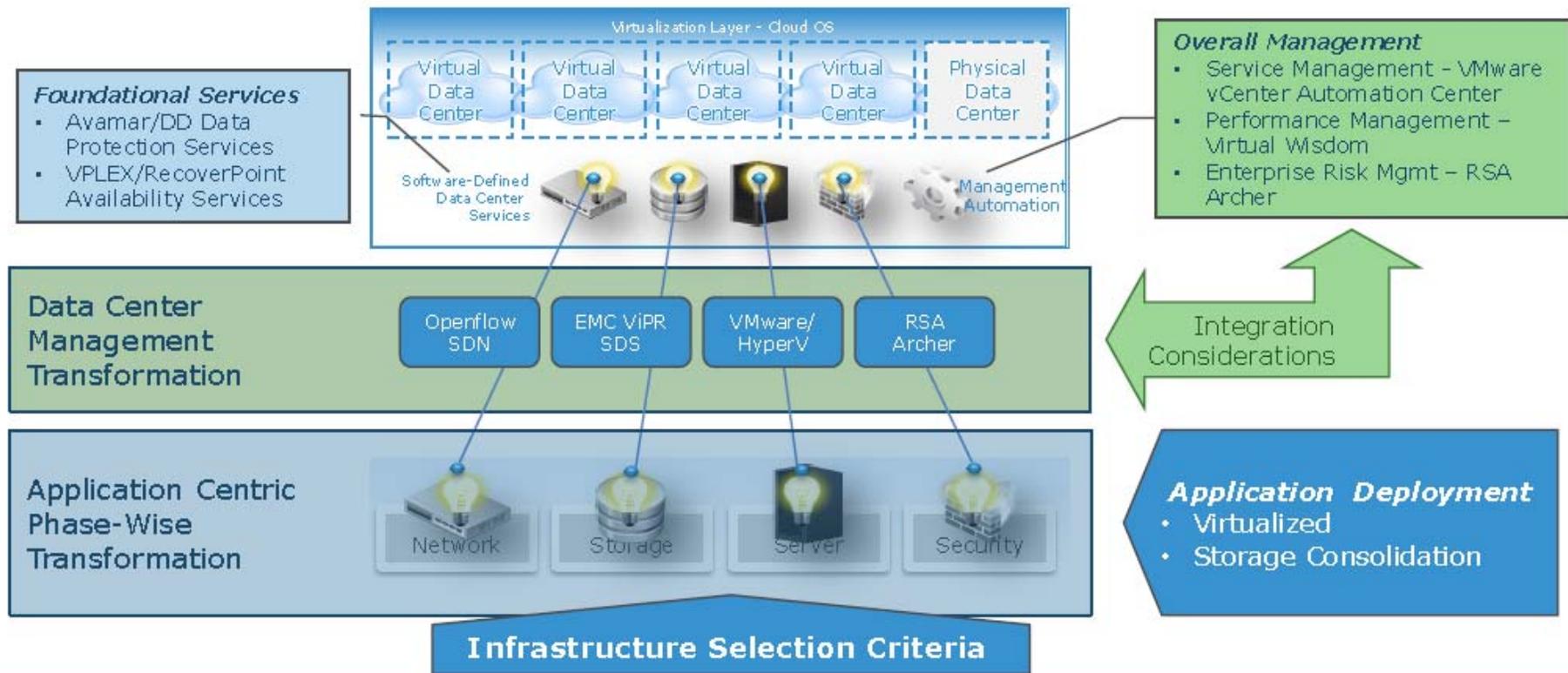
Management

- Lack of extensible management frameworks for some server platforms
- Lack of extensible management framework for software defined storage and networks

Security

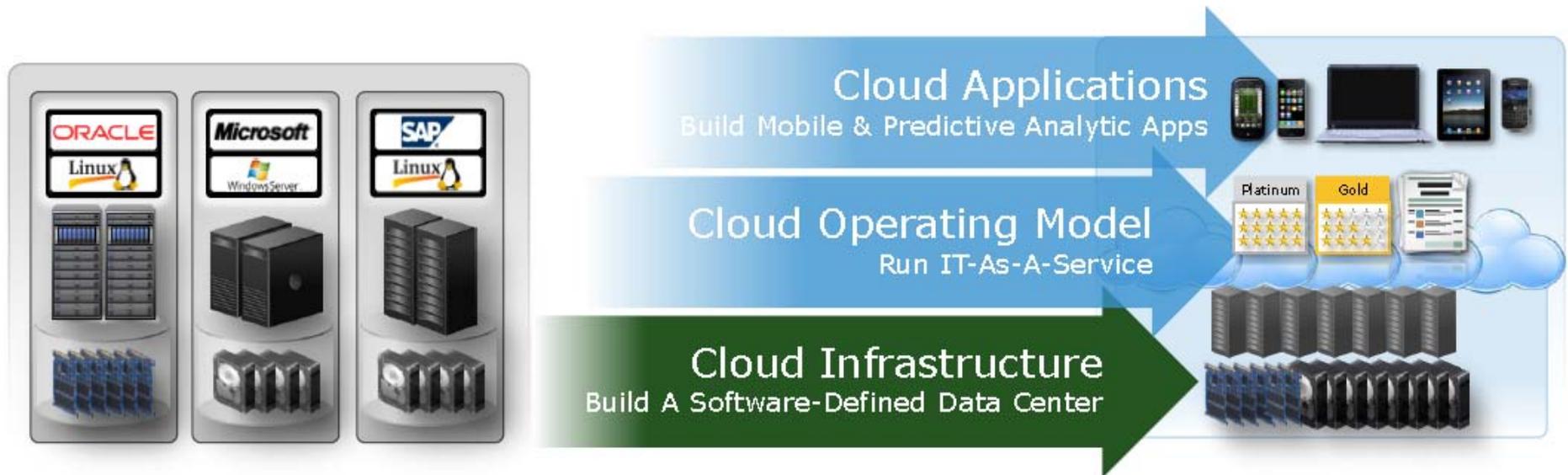
- Security Incident Management
- Policy management

SDDC – Solution Components

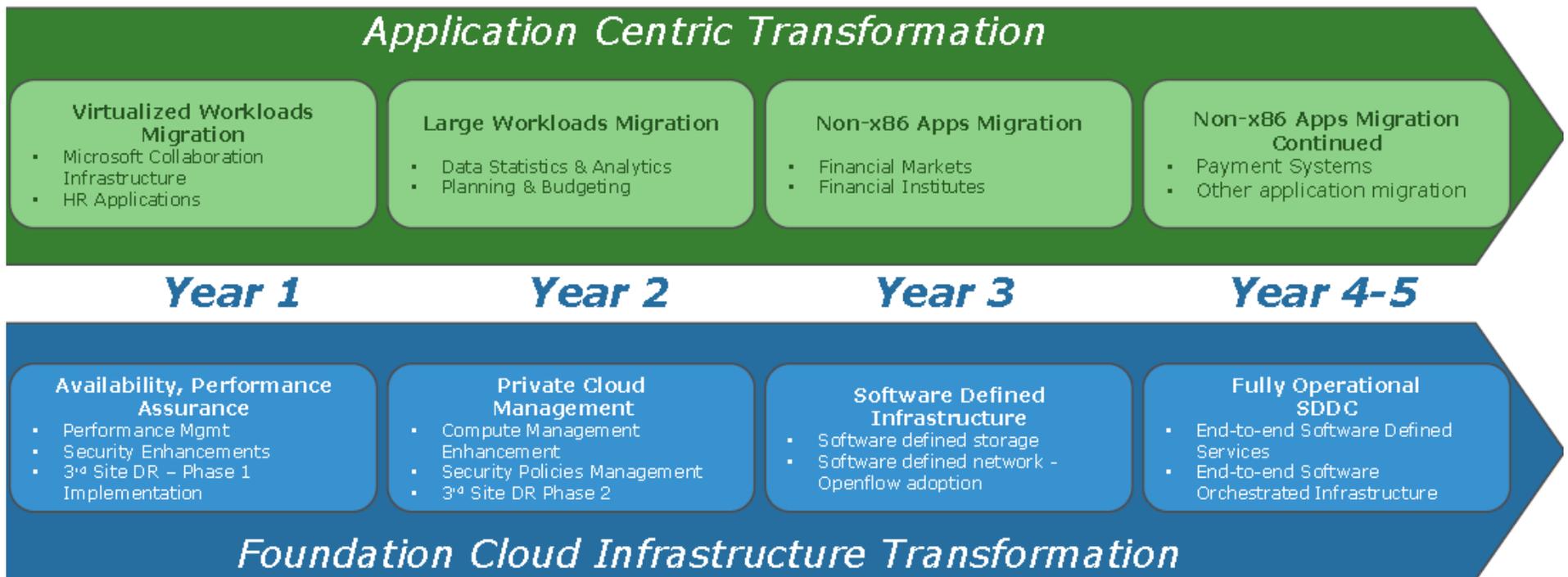


Transformation Roadmap

Steps Of IT Transformation



Proposed Transformation Roadmap



Implementation Plan

Foundational IT Infrastructure Transformation

| Projects | Q4 2013 | Q1 2014 | Q2 2014 | Q3 2014 | Q4 2014 | Q1 2015 | Q2 2015 | Q3 2015 | Q4 2015 | 2016 | 2017 | |
|--|------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|------|------|--|
| Foundational IT Infrastructure Transformation | | | | | | | | | | | | |
| A. Security and Risk Management | Security and Risk Management | | | | | | | | | | | |
| Remote Client Access Controls | | | | | | | | | | | | |
| Security Incident Management | Incident Management | | | | | | | | | | | |
| POC | | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | | |
| Configuration Management Control | Configuration Management | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | | |
| Security Policies Management | | | | | | | | | | | | |
| IT Network Controls | | | | | | | | | | | | |
| Data Security Controls | | | | | | | | | | | | |
| Account Management | | | | | | | | | | | | |
| B. Storage Performance Management | Performance Management | | | | | | | | | | | |
| Virtual Instrument POC | | | | | | | | | | | | |
| Virtual Instrument Implementation | | | | | | | | | | | | |
| C. Enhanced DR | Enhanced DR to 3rd Site | | | | | | | | | | | |
| Initial 3rd Site replication with RecoverPoint | | | | | | | | | | | | |
| Conversion to MetroPoint | | | | | | | | | | | | |
| D. Compute Management | Compute Management | | | | | | | | | | | |
| VMware vCAC Evaluation | | | | | | | | | | | | |
| Design and Solution | | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | | |
| E. SDS | Software Defined Storage | | | | | | | | | | | |
| EMC ViPR Evaluation | | | | | | | | | | | | |
| Data Center Wide Implementation | | | | | | | | | | | | |
| F. SDN | Software Defined Networks | | | | | | | | | | | |
| Openflow Controller Selection and Evaluation | | | | | | | | | | | | |
| Network Re-design | | | | | | | | | | | | |
| Design and Solution | | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | | |

Application Centric Infrastructure Transformation

| Projects | Q4 2013 | Q1 2014 | Q2 2014 | Q3 2014 | Q4 2014 | Q1 2015 | Q2 2015 | Q3 2015 | Q4 2015 | 2016 | 2017 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|------|
| Application Centric Infrastructure Transformation | | | | | | | | | | | |
| A. Microsoft Collaboration | | | | | | | | | | | |
| Collaboration | | | | | | | | | | | |
| Planning Implementation | | | | | | | | | | | |
| Back Up for Collaboration Environment | | | | | | | | | | | |
| B. HR Applications | | | | | | | | | | | |
| HR Applications | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | |
| Back Up for HR Applications Environment | | | | | | | | | | | |
| C. Data Statistics and Analytics | | | | | | | | | | | |
| Data Statistics and Analytics | | | | | | | | | | | |
| Detailed design and solutioning | | | | | | | | | | | |
| Data Migration planning | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | |
| Back Up for Data Statistics and Analytics Environment | | | | | | | | | | | |
| D. Planning and Budgeting | | | | | | | | | | | |
| Planning and Budgeting | | | | | | | | | | | |
| Detailed design and solutioning | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | |
| E. Financial Markets | | | | | | | | | | | |
| Financial Markets | | | | | | | | | | | |
| Assessment of re-platforming | | | | | | | | | | | |
| Design and Solutioning | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | |
| F. Financial Institutes | | | | | | | | | | | |
| Financial Institutes | | | | | | | | | | | |
| Assessment of re-platforming | | | | | | | | | | | |
| Design and Solutioning | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | |
| G. Payment | | | | | | | | | | | |
| Payment | | | | | | | | | | | |
| Assessment of re-platforming | | | | | | | | | | | |
| Design and Solutioning | | | | | | | | | | | |
| Planning and Implementation | | | | | | | | | | | |

Summary of Benefits

2014

- Extended DR Protection beyond Bangkok
- Real-time Performance visibility
- Smart Workplace
- Agile HR Applications

2015

- Fully Active/Active Data Centers
- Trusted Private Cloud
- Open Infrastructure based Analytics

2016

- Fully Operational x86 SDDC
- SDN & SDS in place

2017...

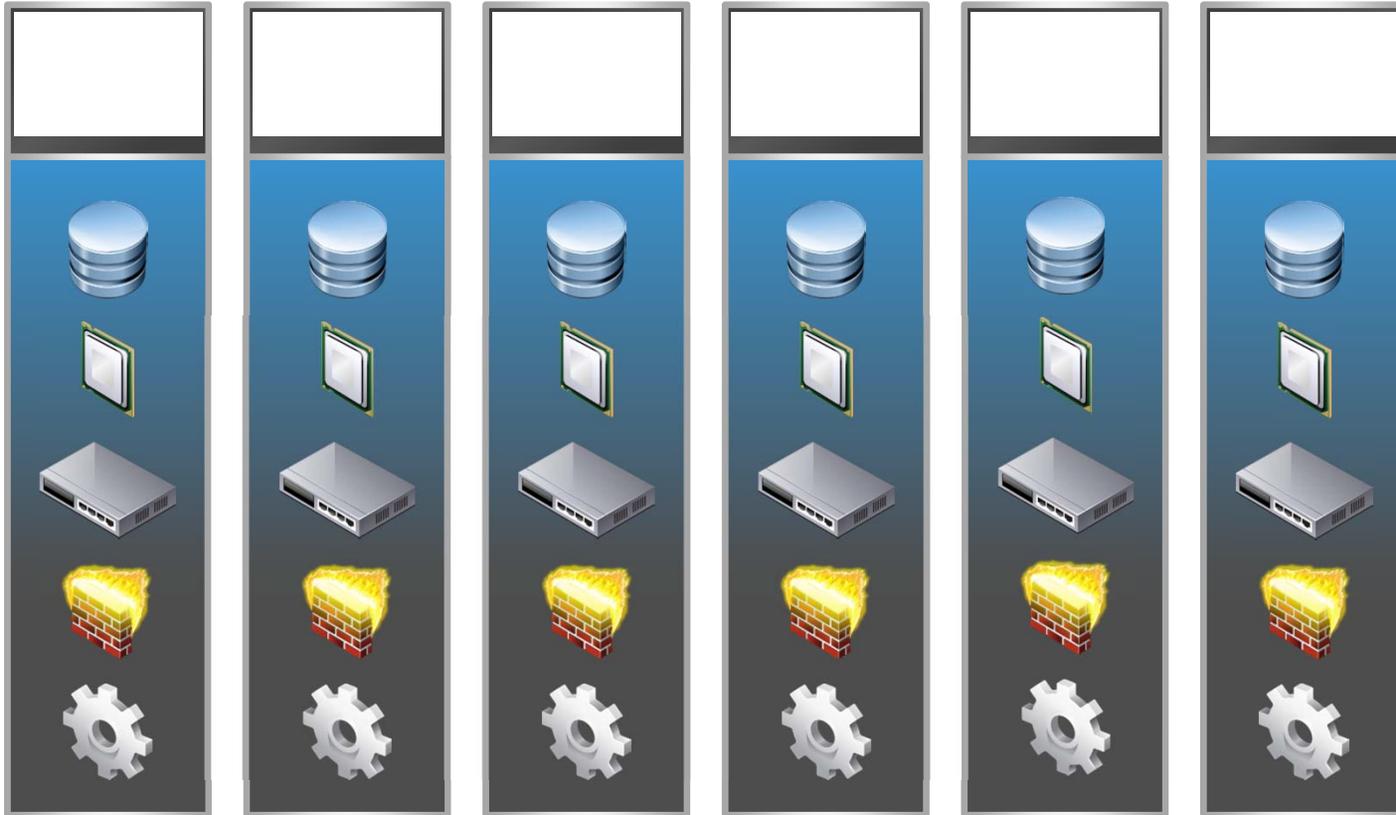
- Unix to x86
- End-to-end Orchestration
- Consolidated Resource Pools

CASE Study #2

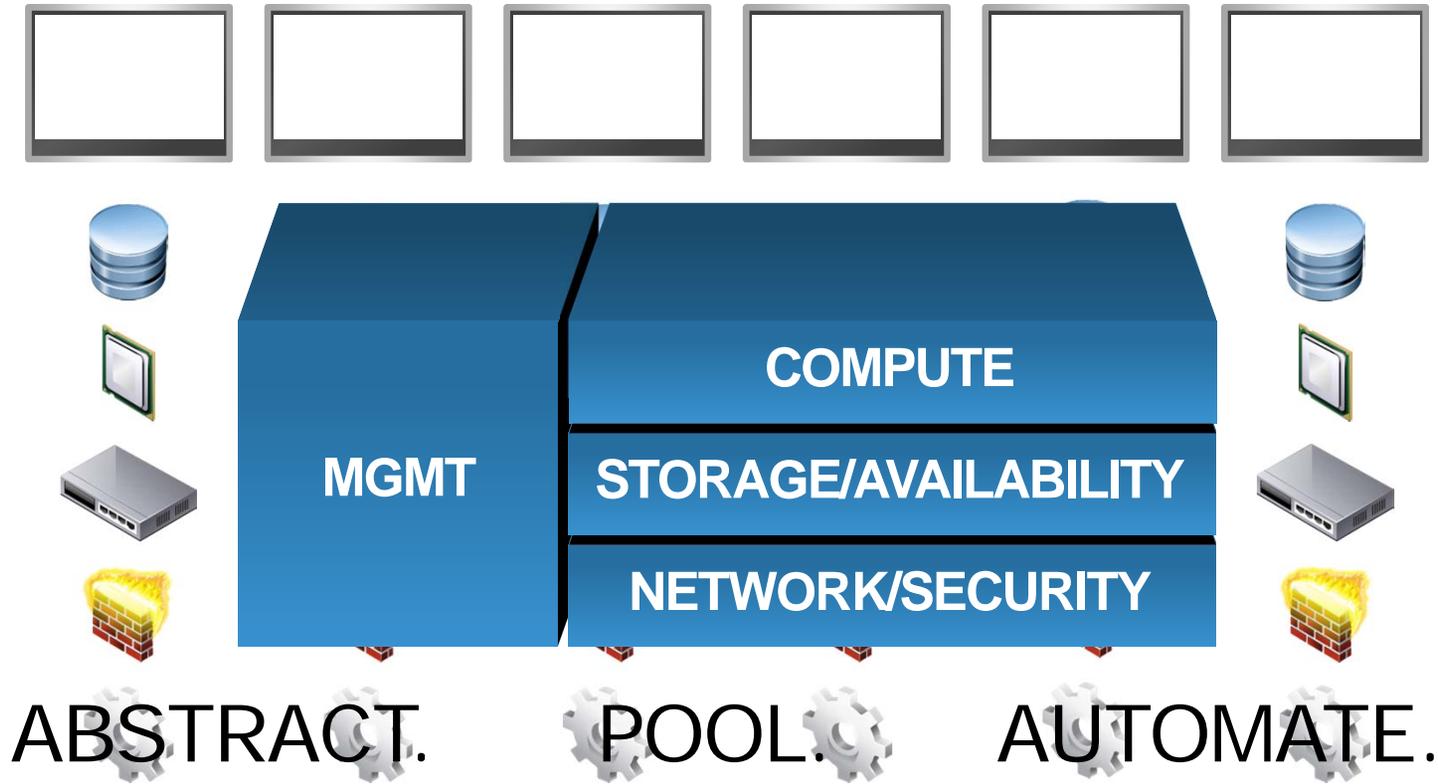
New Infrastructure for Internal IT

หน่วยงานทาง วิทยาศาสตร์ ในประเทศไทย

IT Transformation Project



Next Gen: The Software Defined Data Center

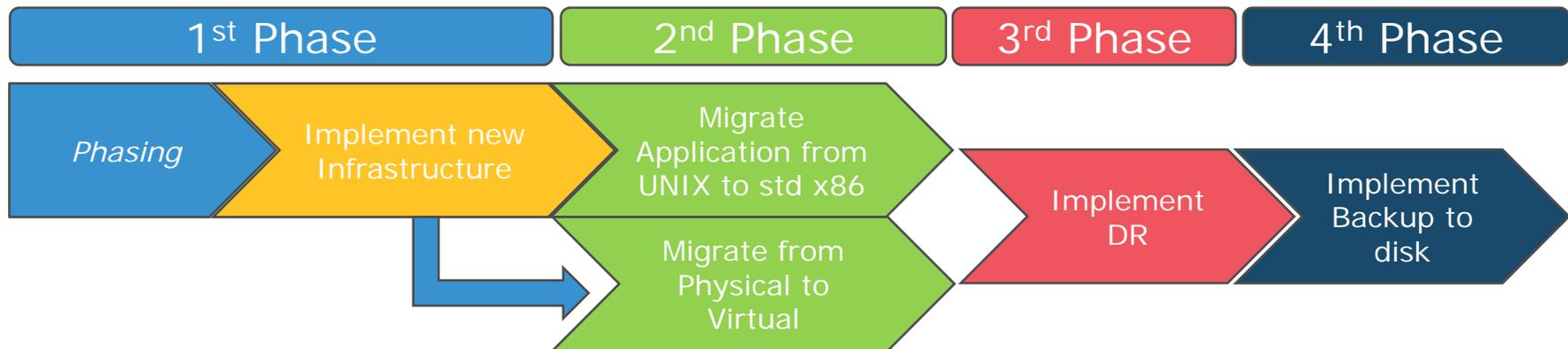


Challenging in this organization

- Island of server and storage -- Less utilization
- Support new requirement from business unit
e.g., File sharing, Backup, and DR
- CIO have vision to move their IT support to IT services

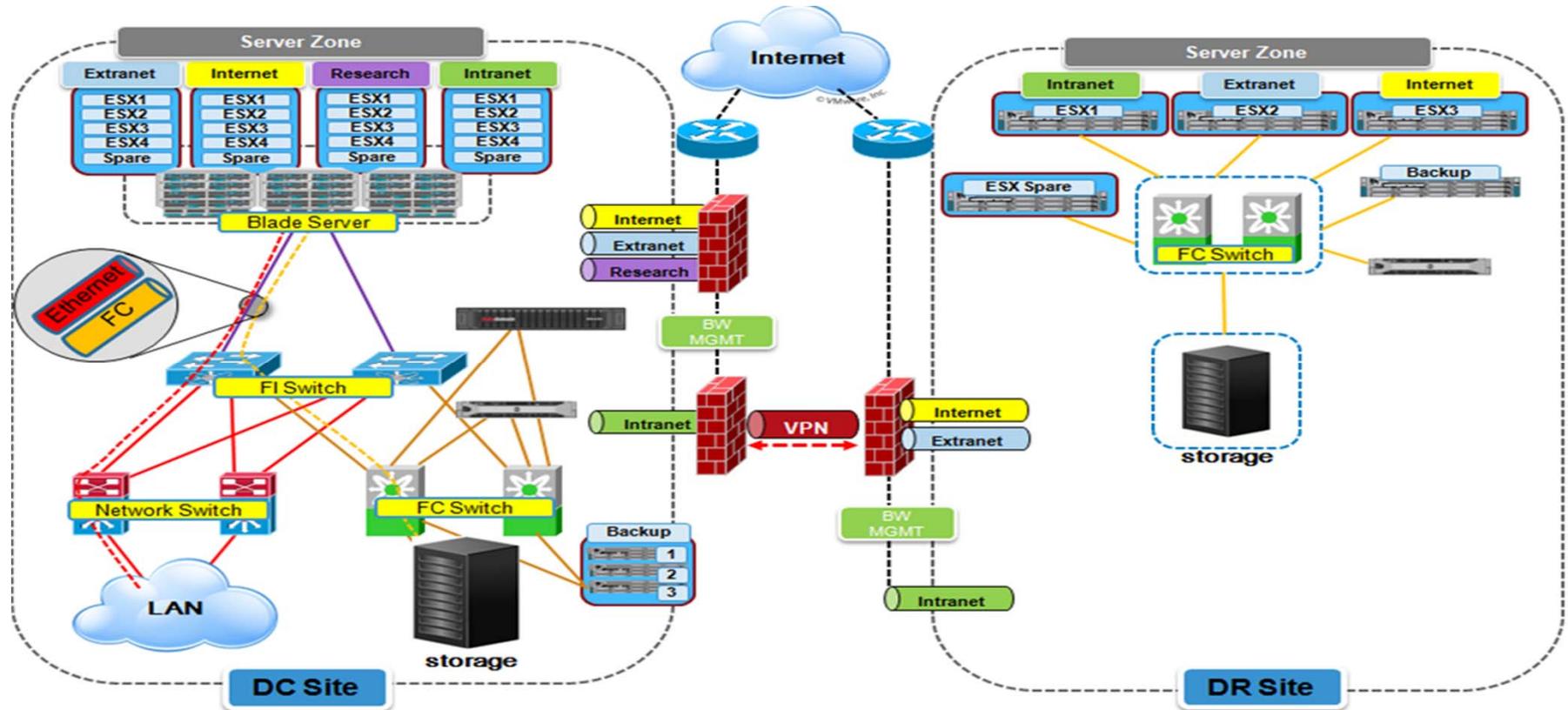
Start with RFI Session (Request For Information)

2010 - 2014



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To be New Infrastructure



Result of this strategy

| Challenge | Result |
|---|---|
| Island of server and storage -- Less utilization | Leverage Server virtualization that customer can reduce overall TCO and better resources utilization |
| Support new requirement from business unit e.g., File sharing, Backup, and DR | Address by new technology for all requirement |
| CIO have vision to move their IT support to IT services | After they consolidate all server infrastructure, they have more room to provide IaaS to other department that under the same Ministry (Currently 3-4 department) |

Summary

- **Start with Develop 3-5 Years IT strategic roadmap**
- **Focus on What is your business requirement?**
 - **RFP**
 - **SOW**

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