



Cloud Computing 인프라 자동화 및 관리방안

Pulse2010

Pulse Comes to You

Optimizing the World's Infrastructure



Agenda

- IT Transformation Roadmap
- Cloud Management Platform

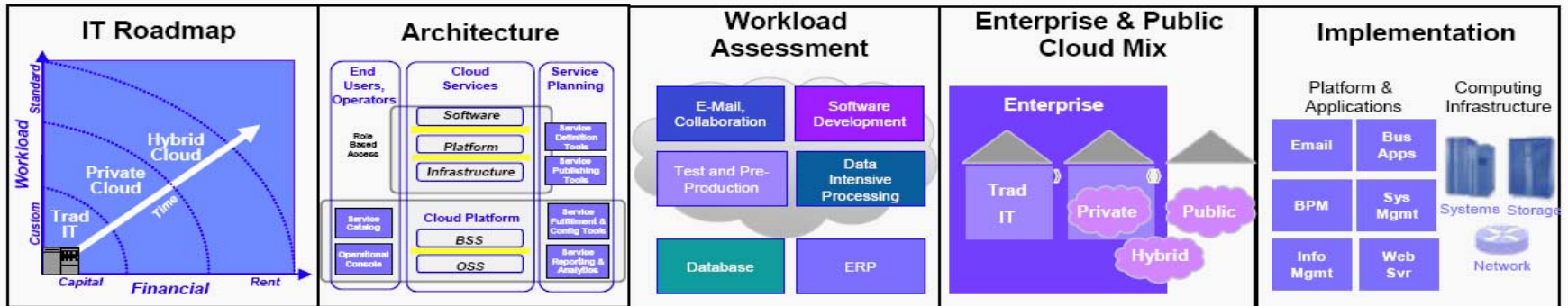
IT Transformation Roadmap

Pulse2010 
Pulse Comes to You

Adopting Cloud

- 1 Cloud 전환(transformation) IT Roadmap
- 2 Cloud Reference Architecture
- 3 Cloud Service 대상
- 4 Cloud 적용 모델
- 5 Cloud Implementation

5 Steps to Cloud



IT Transformation Roadmap

- 인프라스트럭처의 복잡성 경감
- 필요 관리 인력 경감
- 비즈니스 탄력성 향상

관리 비용
* 감소

Consolidate

Simplified

- 물리적 리소스의 한계 제거
- 하드웨어 활용도의 증가
- 보다 적은 물리적 공간 사용
- 하드웨어 비용 감소

배치의 간소화

Virtualize

Shared

- 표준화된 서비스
- 배치 사이클의 혁신적인 단축
- 대규모 확장성
- 새로운 프로세스와 서비스의 유연한 능력

Automate

Dynamic

- 탄력적 확장성
- 서비스 빌딩 자동화

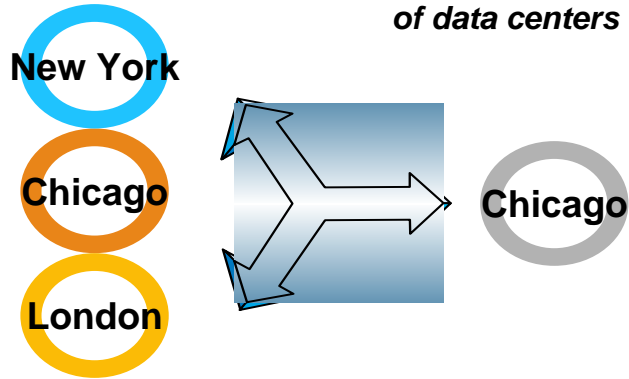
Cloud



IT Transformation Roadmap > Consolidate

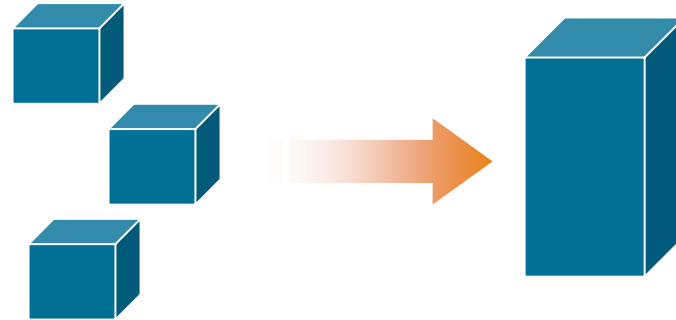
Centralization

Reducing the number of data centers



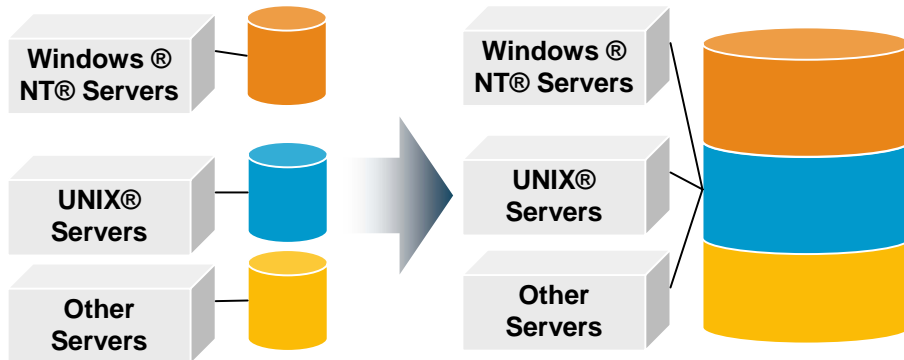
Physical Consolidation (e.g. by Virtualization)

Reducing older servers with fewer more powerful systems



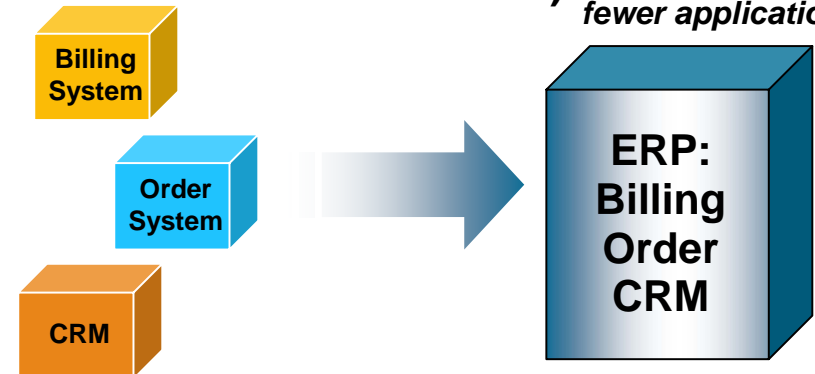
Data Consolidation & Integration

Centralizes data from different sources. Reduce instances



Application Integration (= Functional Consolidation)

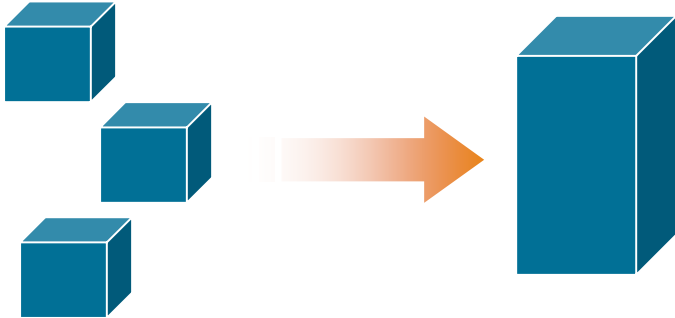
Migrates several applications into fewer applications



IT Transformation Roadmap > Consolidate

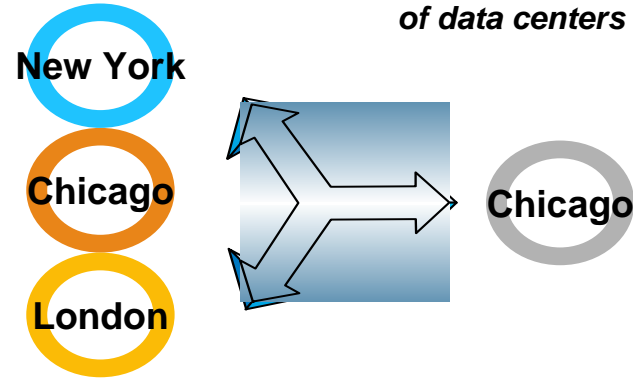
Physical Consolidation (e.g. by Virtualization)

*Reducing older servers
with fewer more powerful
systems*



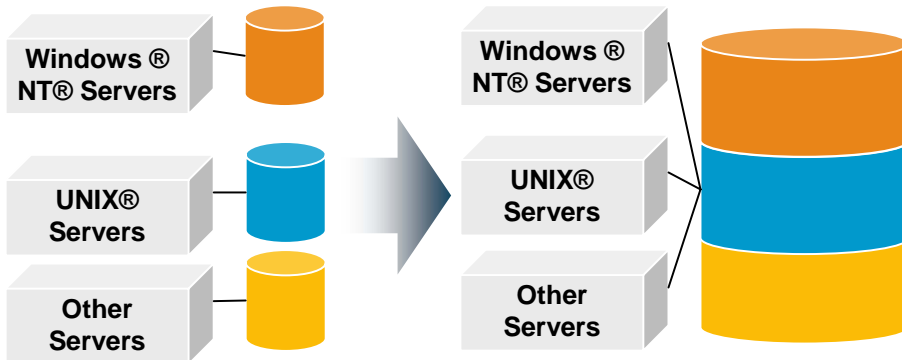
Centralization

*Reducing the number
of data centers*



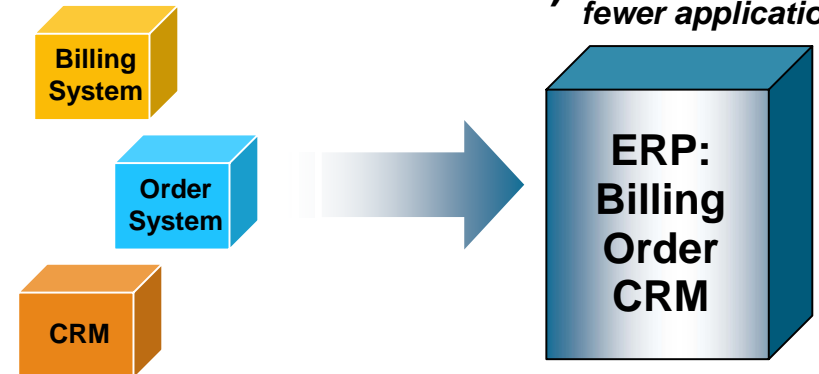
Data Consolidation & Integration

*Centralizes data from
different sources.
Reduce instances*



Application Integration (= Functional Consolidation)

*Migrates several
applications into
fewer applications*



IT Transformation Roadmap > Consolidate

IT 자원
현황???

자산 정보???

성능 현황?

Manual
Operation

IT 구성 요소간
관계???

관리
프로세스???

장애? 문제?



IT Transformation Roadmap > Consolidate

Management Platform

모니터링

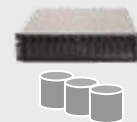
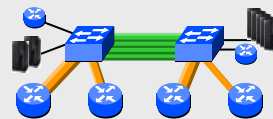
Automatic
Discovery

Provisioning
(OS, SW, Patch,
Server, NW)

프로세스
CMDB

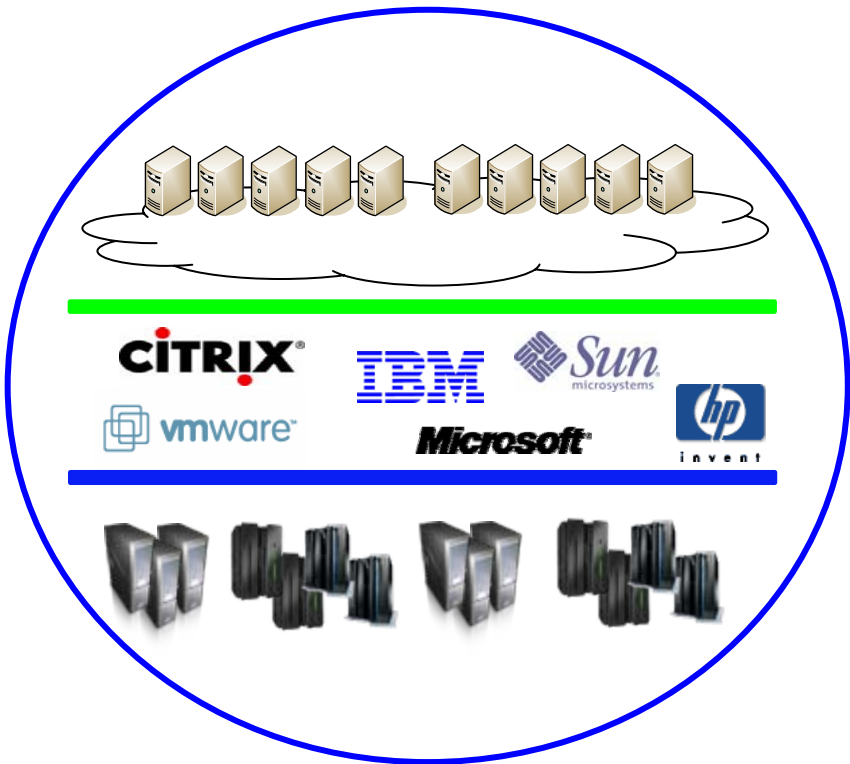
IT 인프라

Physical Layer

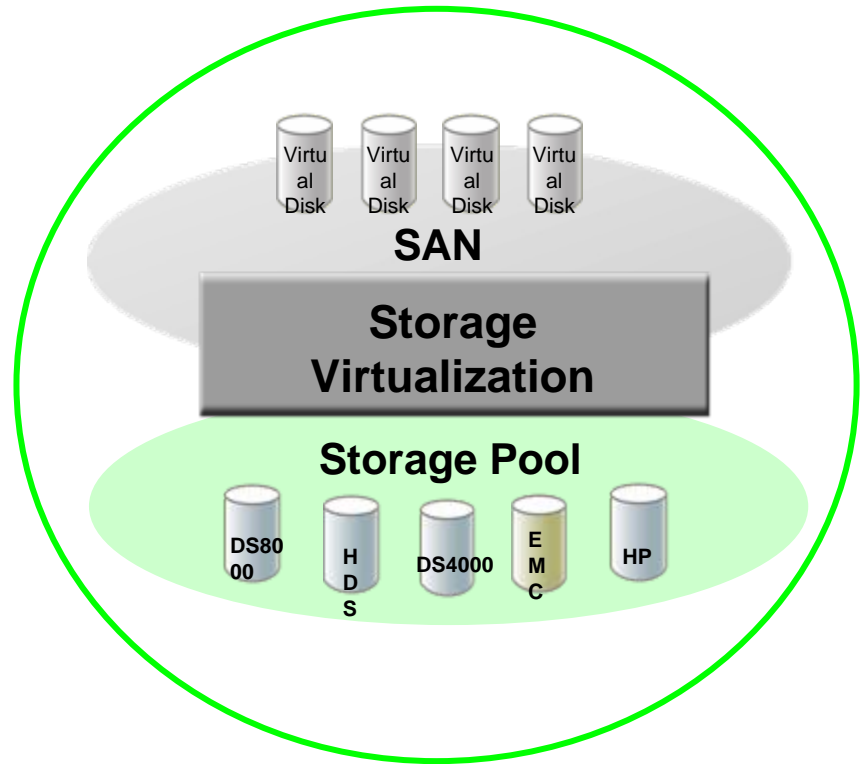


IT Transformation Roadmap > Virtualize

Server Virtualization



Storage Virtualization



IT Transformation Roadmap > Virtualize

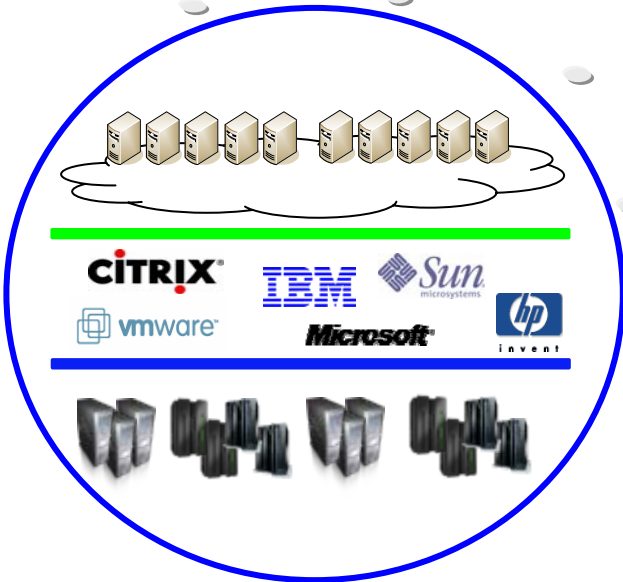
이미지 관리

가상화
호스트
자원현황???

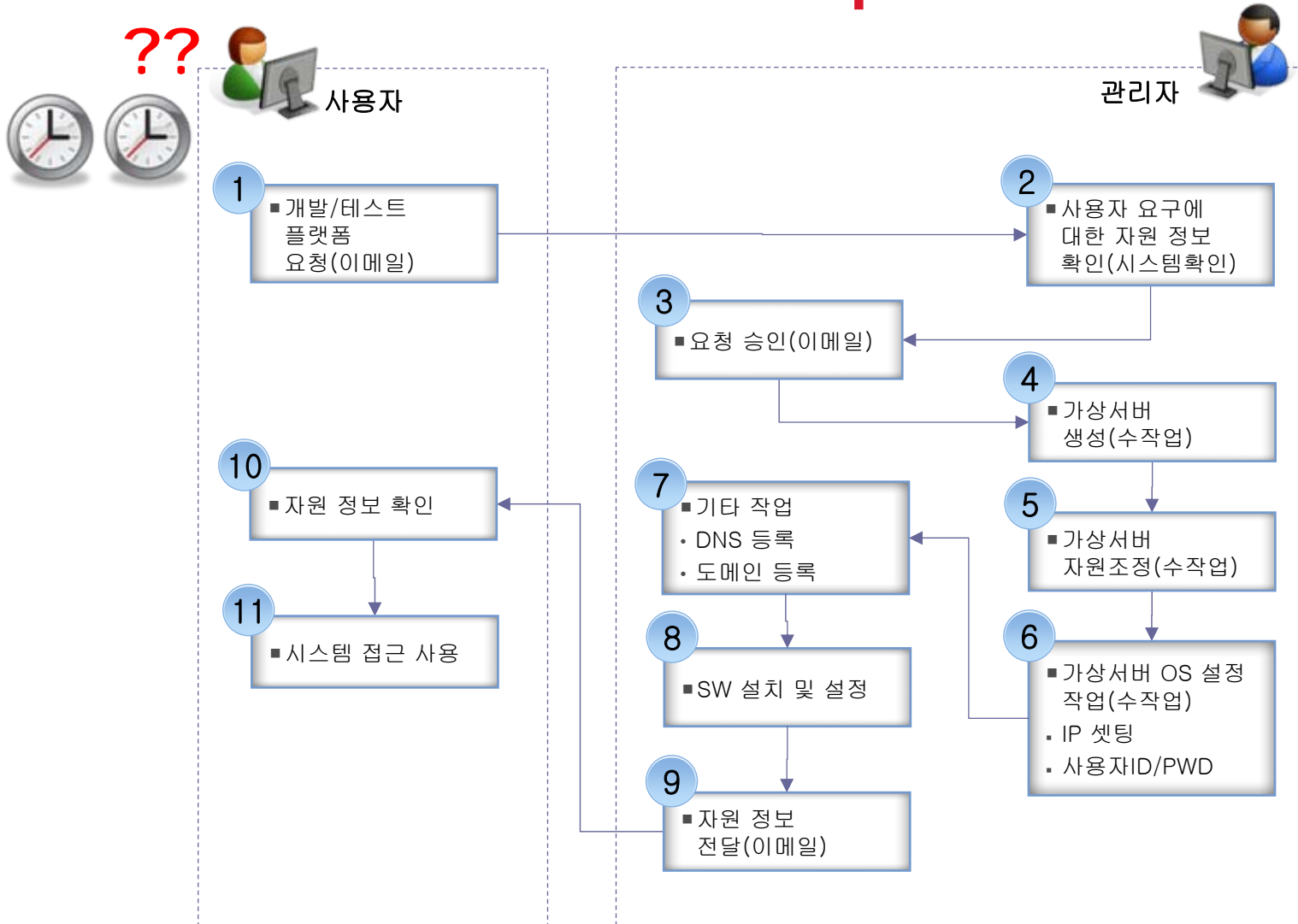
가상서버
현황???

가상서버 관련
Manual
Operation

가상화 환경
모니터링



IT Transformation Roadmap > Virtualize



IT Transformation Roadmap > Virtualize

Management Platform

가상화 환경 모니터링	가상화 환경 Discovery	가상화 Provisioning	
모니터링	Automatic Discovery	Provisioning	프로세스 CMDB

IT 인프라 Virtualization



Virtual
Servers



Virtual
Storage



Virtual
Networks

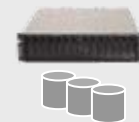
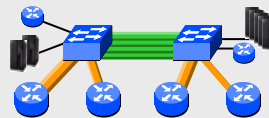


Virtual
Applications &
Middleware

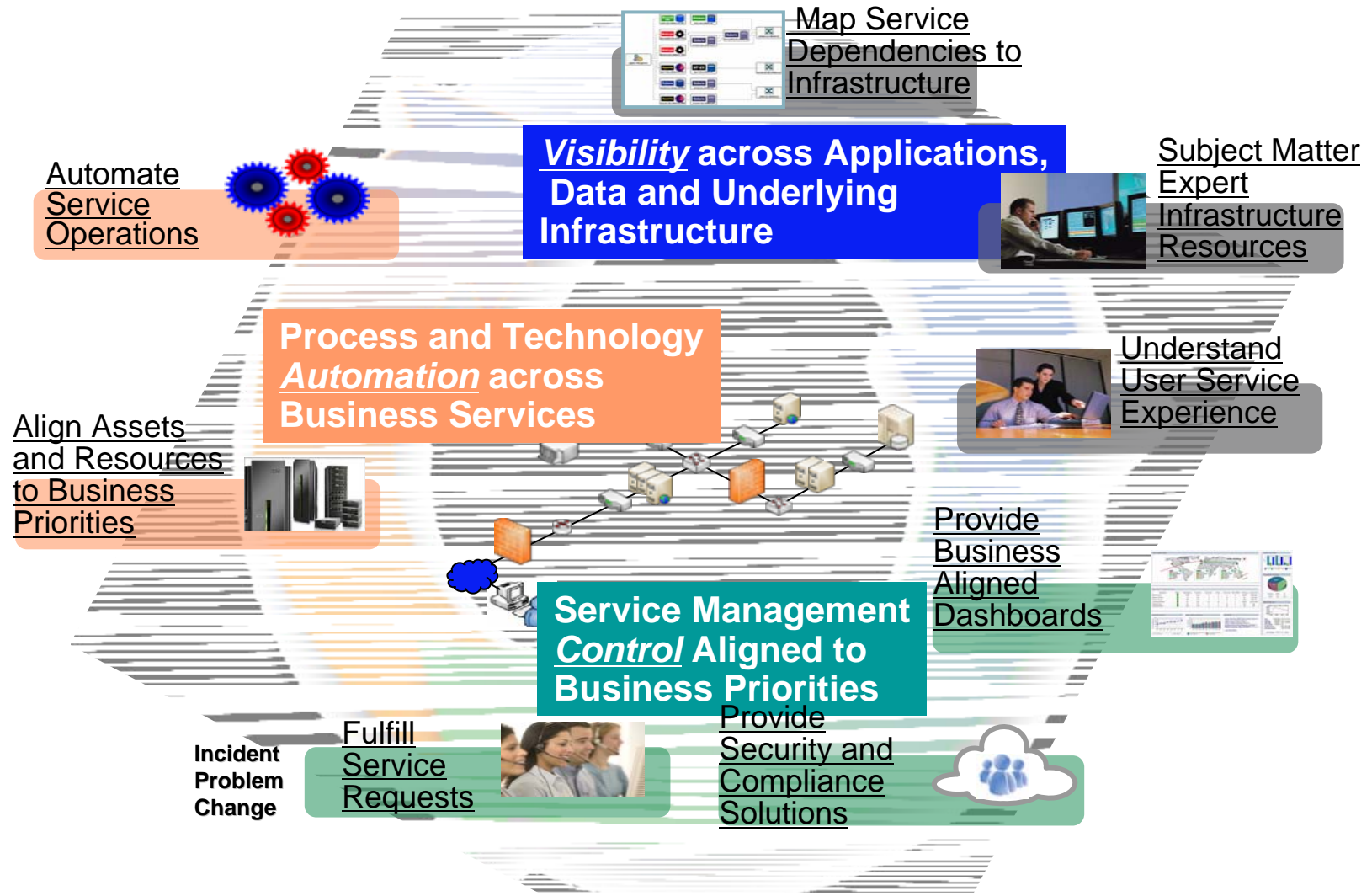


Virtual
Clients

IT 인프라 Physical Layer



IT Transformation Roadmap > Automate/Dynamic



IT Transformation Roadmap > Automate/Dynamic

Management Platform

		End-to-end Provisioning	프로세스 자동화
가상화 환경 모니터링	가상화 환경 Discovery	가상화 Provisioning	
모니터링	Automatic Discovery	Provisioning	프로세스 CMDB

IT 인프라 Virtualization



Virtual Servers



Virtual Storage



Virtual Networks

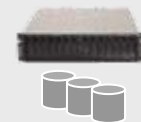
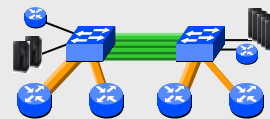


Virtual Applications & Middleware

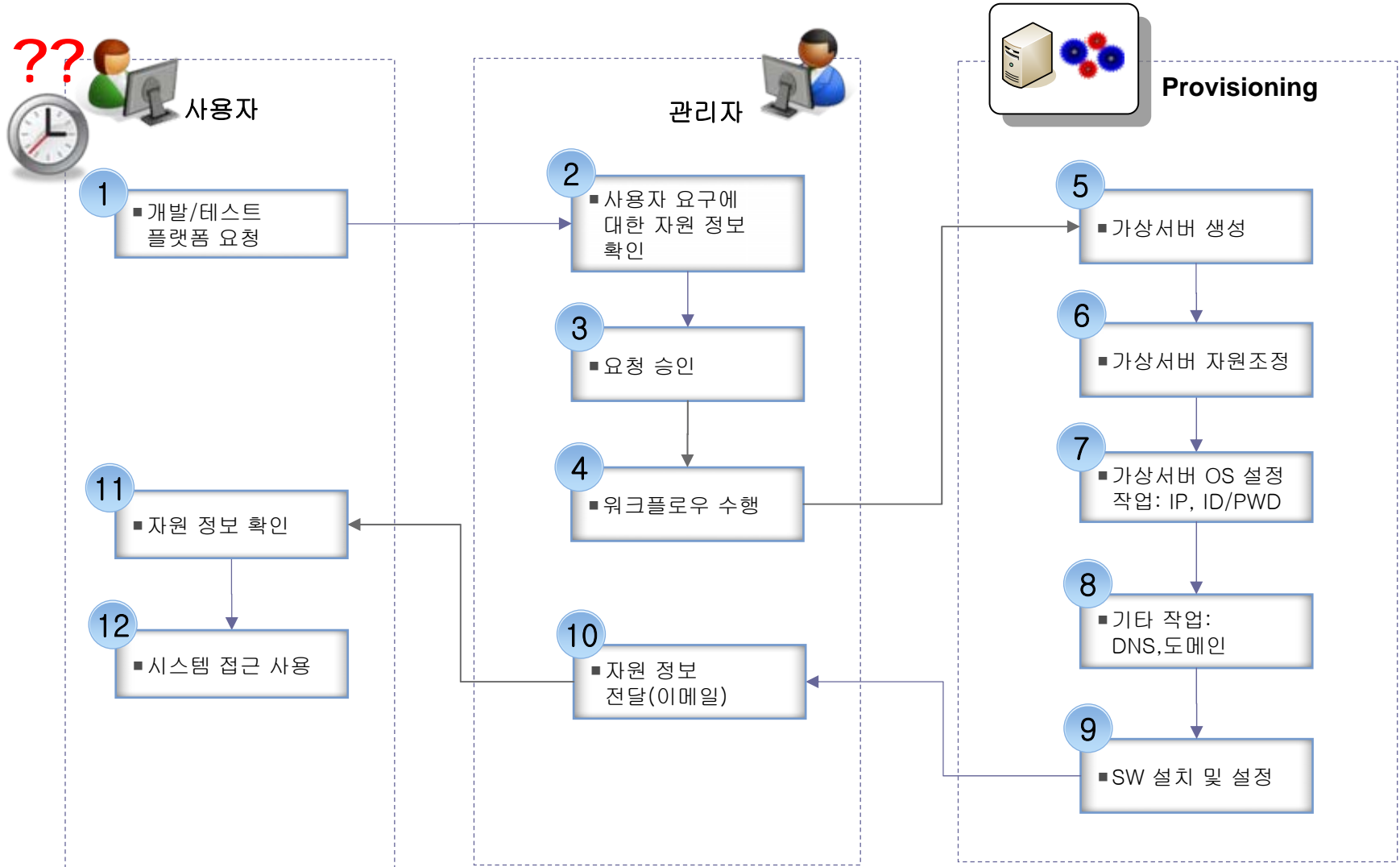


Virtual Clients

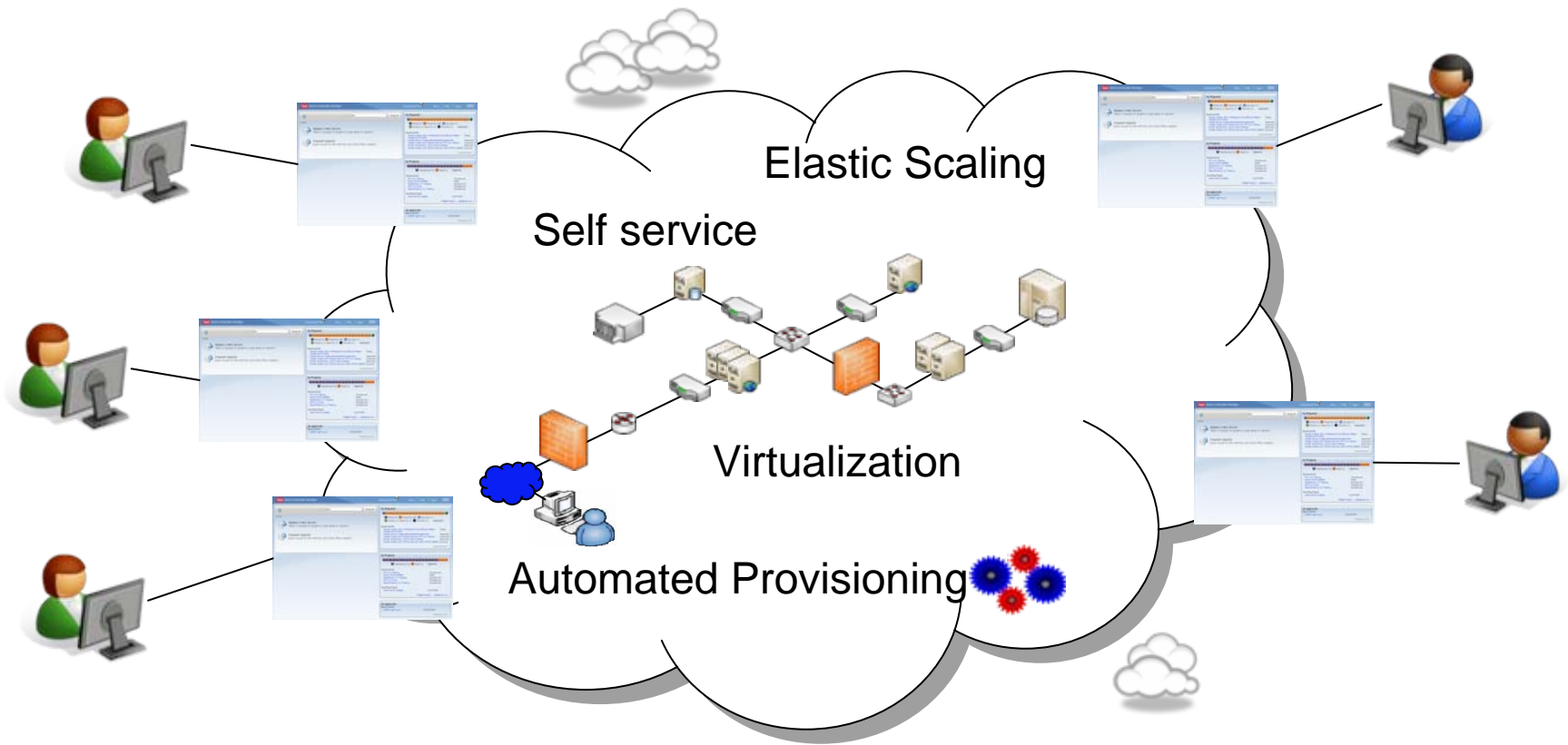
IT 인프라 Physical Layer



IT Transformation Roadmap > Automate/Dynamic



IT Transformation Roadmap > Cloud



IT Transformation Roadmap > Cloud

Management Platform

			Self service Service Catalog	서비스 포탈 Billing
			End-to-end Provisioning	프로세스 자동화
가상화 환경 모니터링	가상화 환경 Discovery	가상화 Provisioning		
모니터링	Automatic Discovery	Provisioning	프로세스 CMDB	

IT 인프라 Virtualization



Virtual Servers



Virtual Storage



Virtual Networks

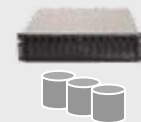
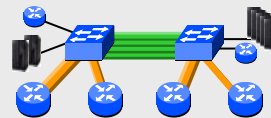


Virtual Applications & Middleware

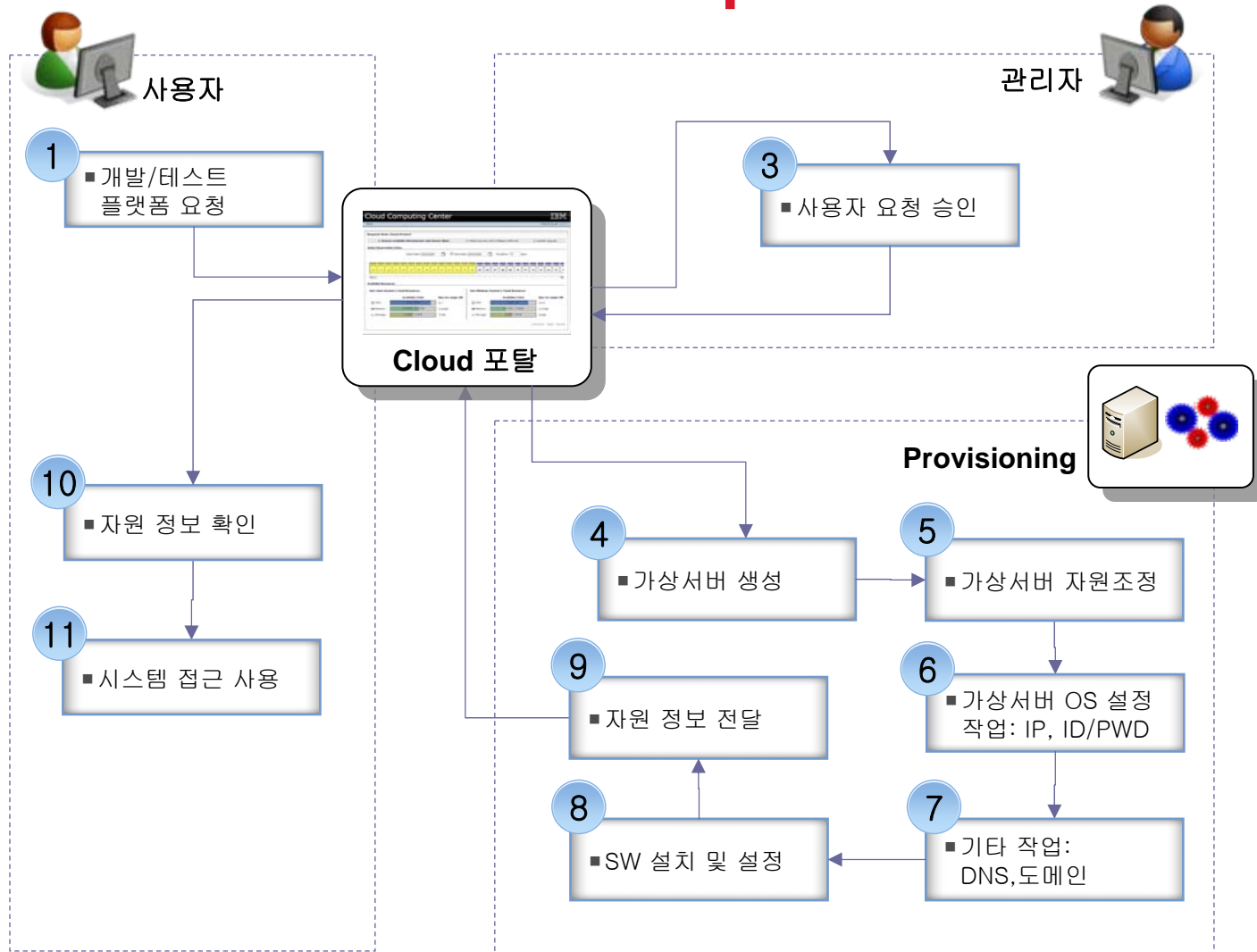


Virtual Clients

IT 인프라 Physical Layer



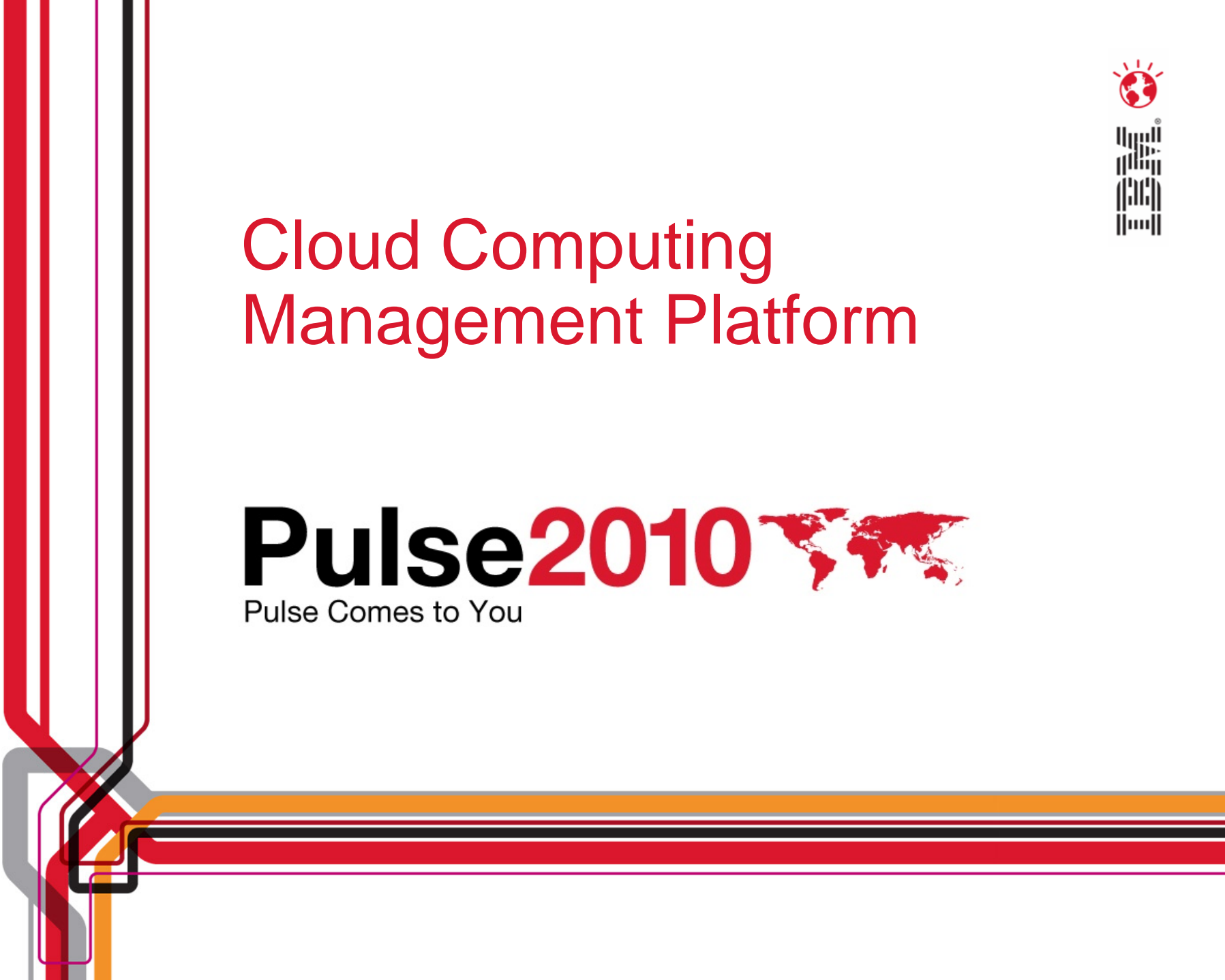
IT Transformation Roadmap > Cloud



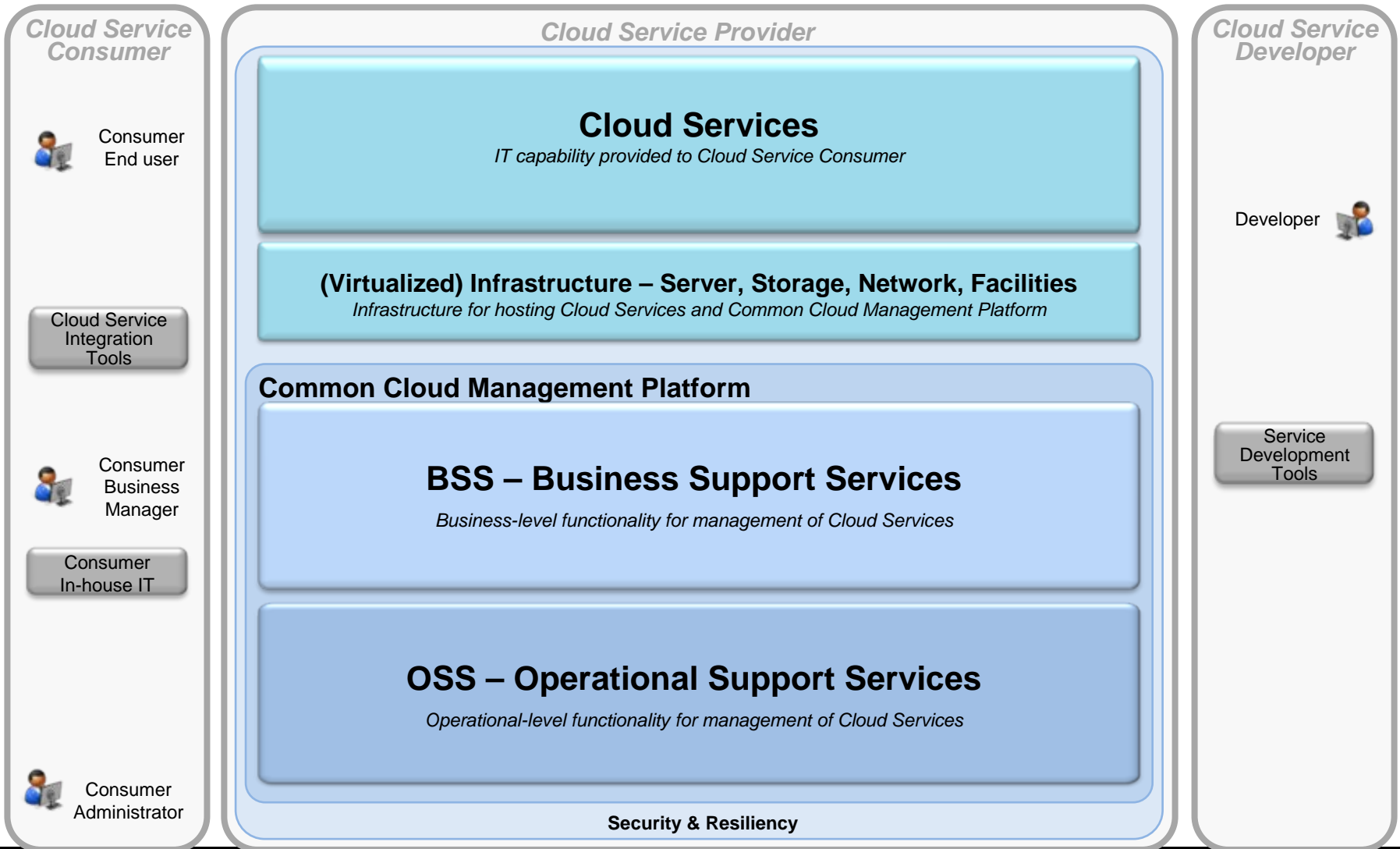


Cloud Computing Management Platform

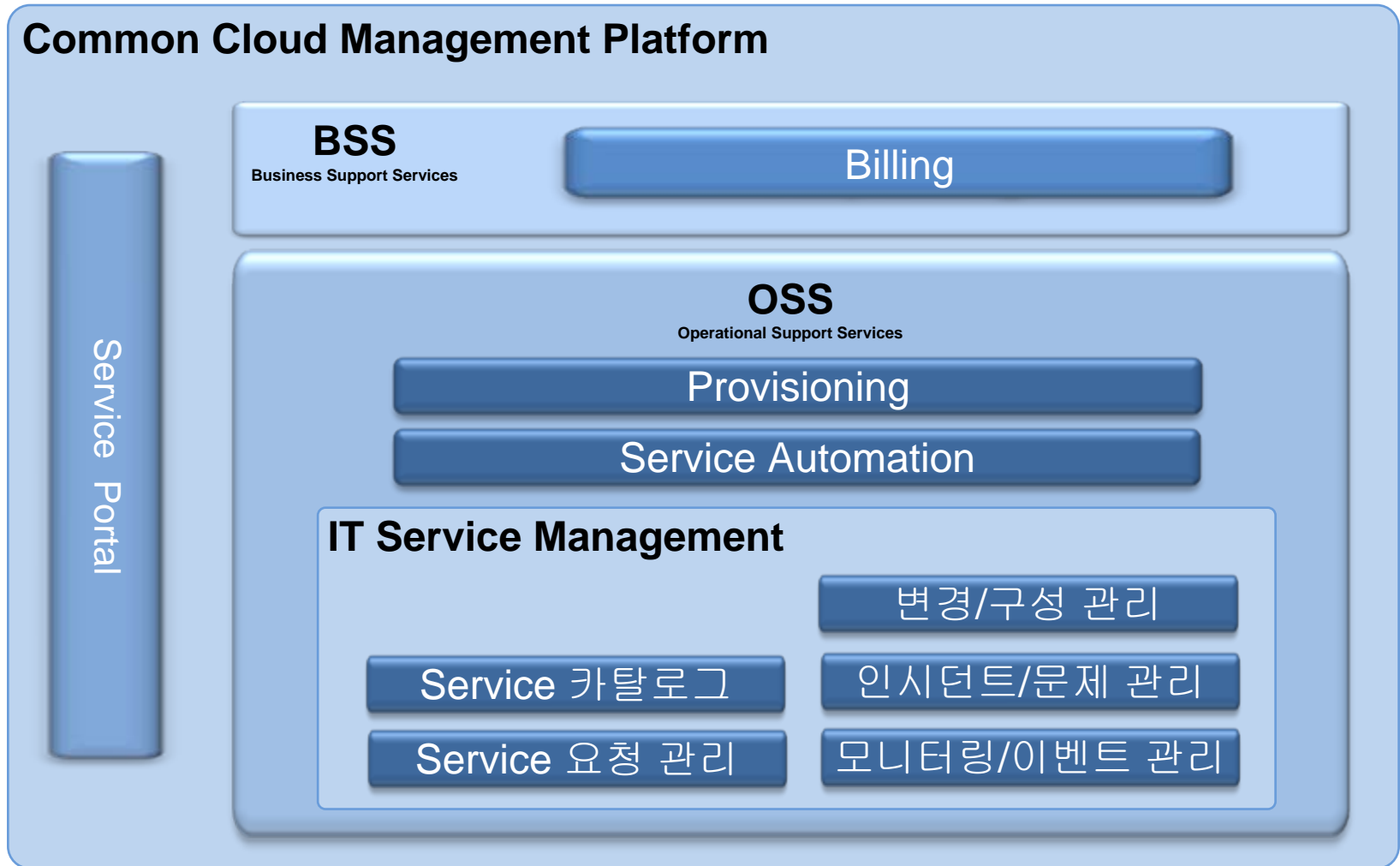
Pulse2010 
Pulse Comes to You



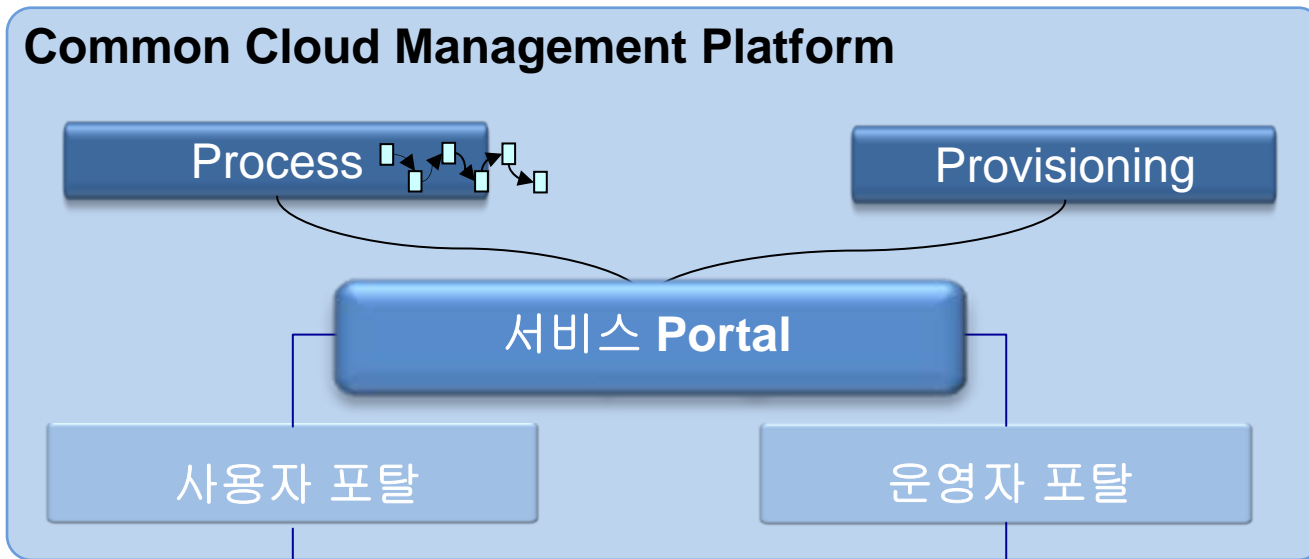
Cloud Computing Reference Architecture



Cloud Computing Reference Architecture



Cloud Computing > 서비스 Portal

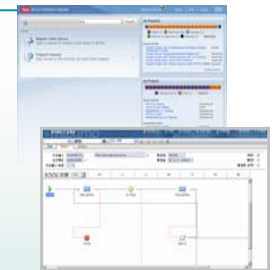


Self Service
Service Catalog 조회
Service 신청/조회
 할당자원 조회



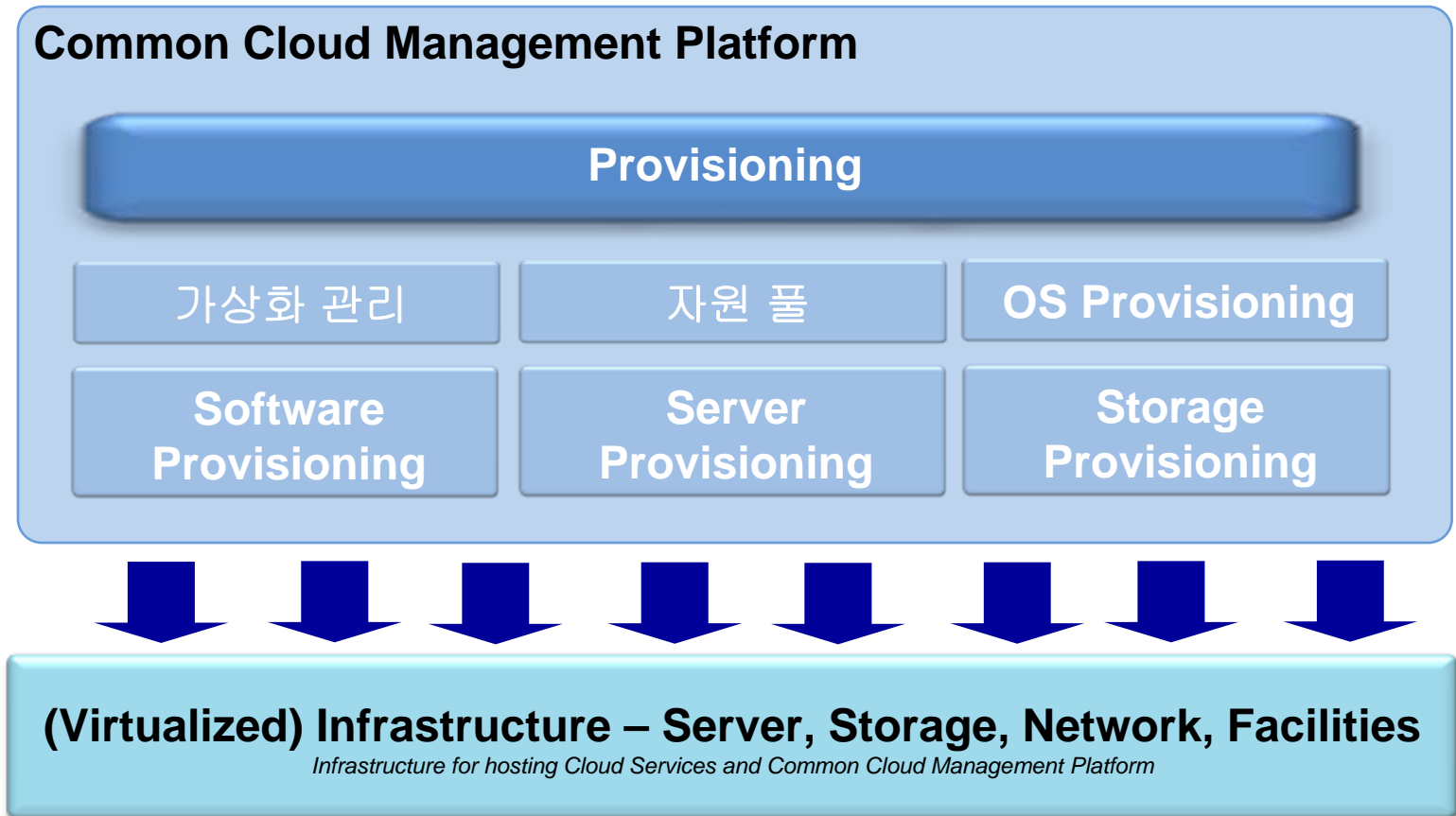
서비스 이용자

사용자 관리
 요청 승인
Service Catalog 생성
 운영 프로세스 관리
Image 관리

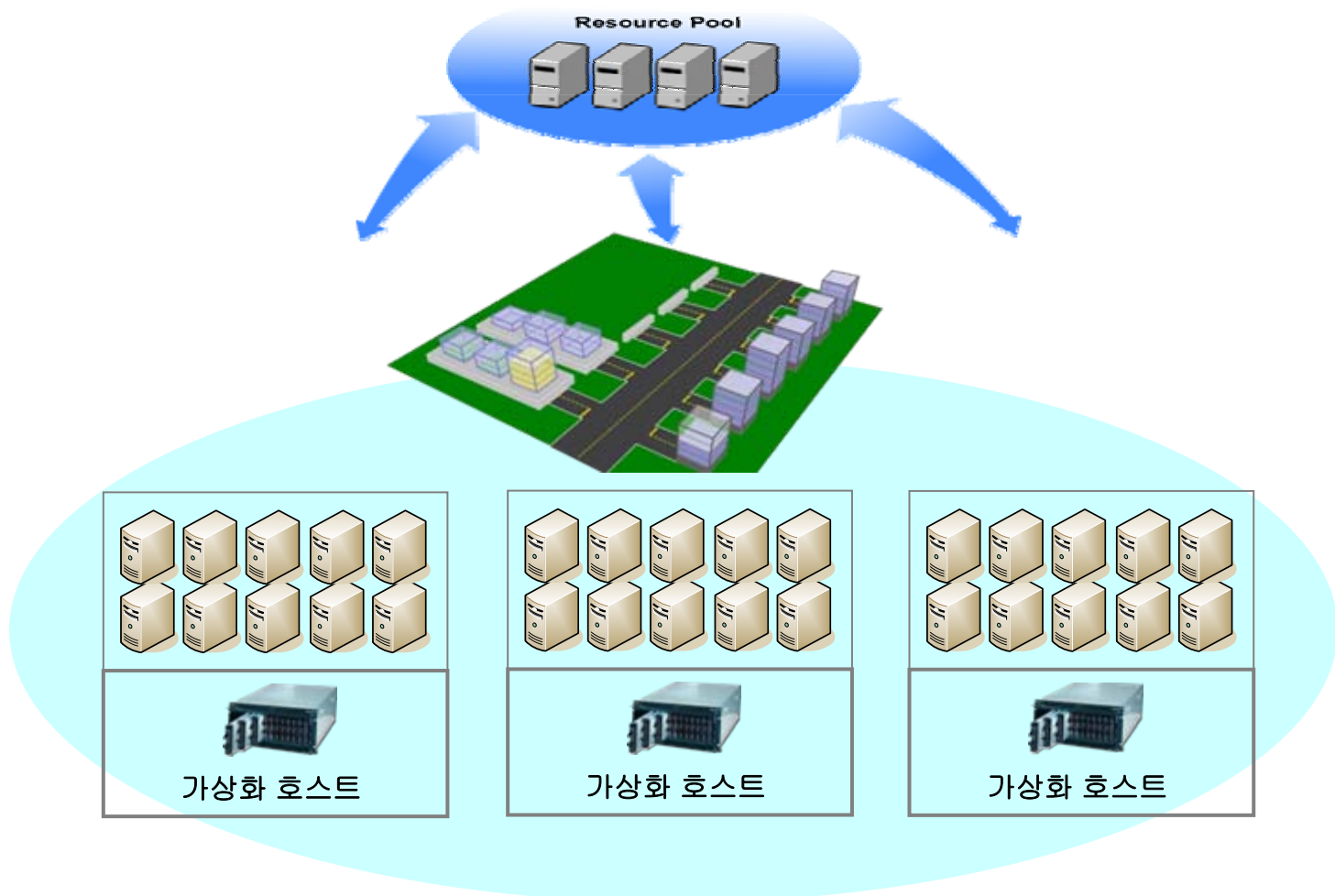


관리자

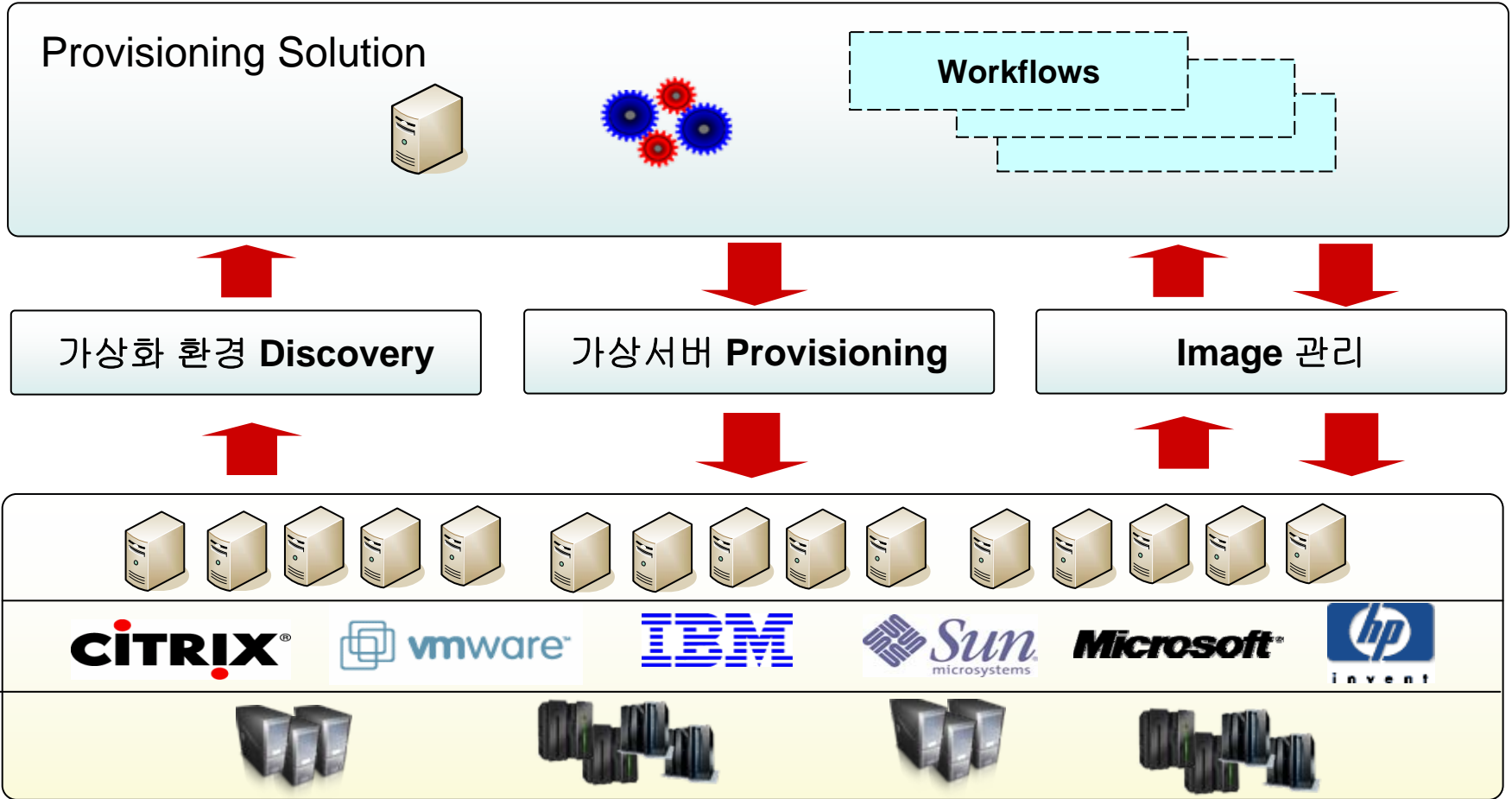
Cloud Computing > Provisioning



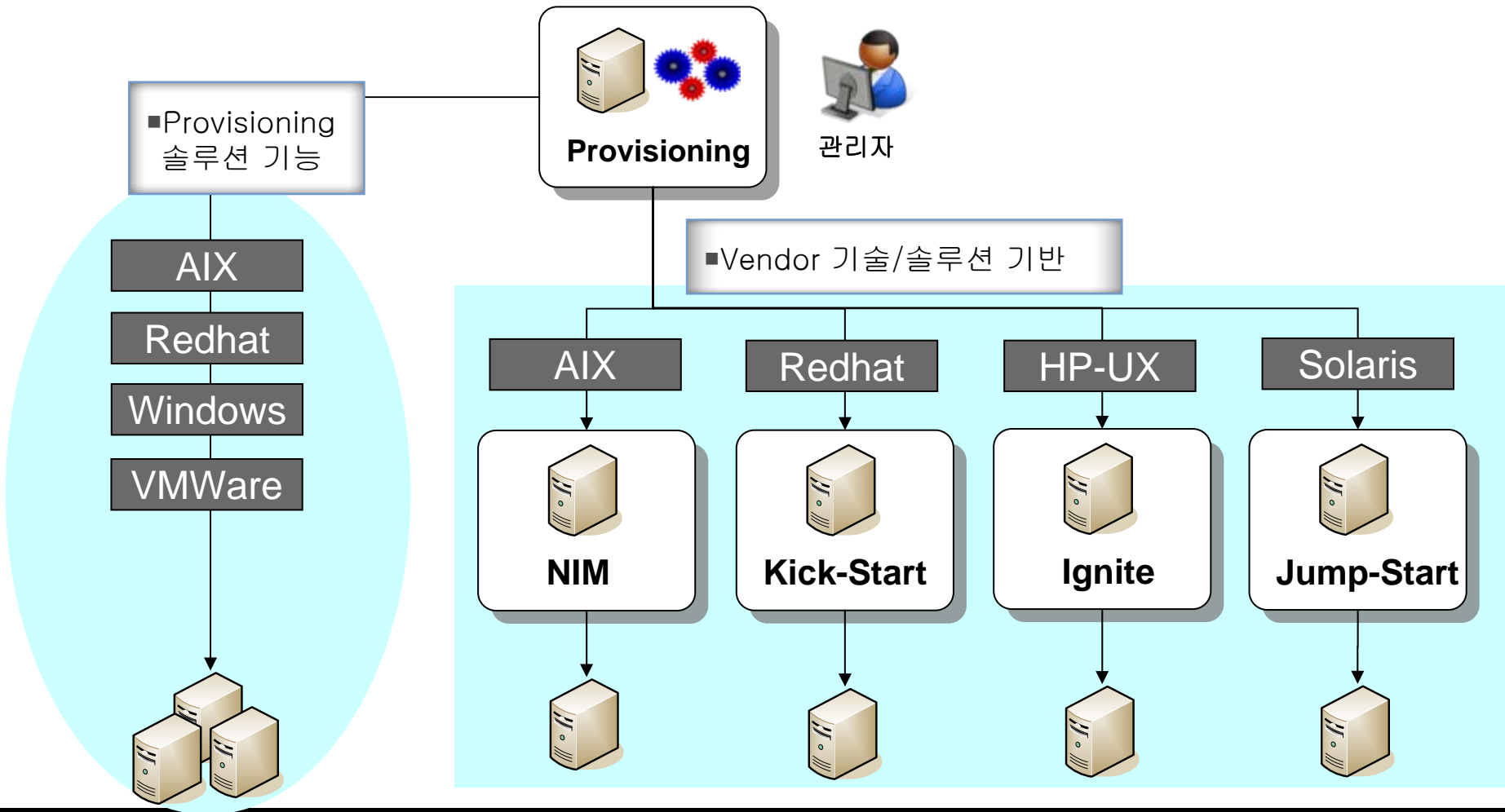
Provisioning > 자원 풀



Provisioning > 가상화 관리

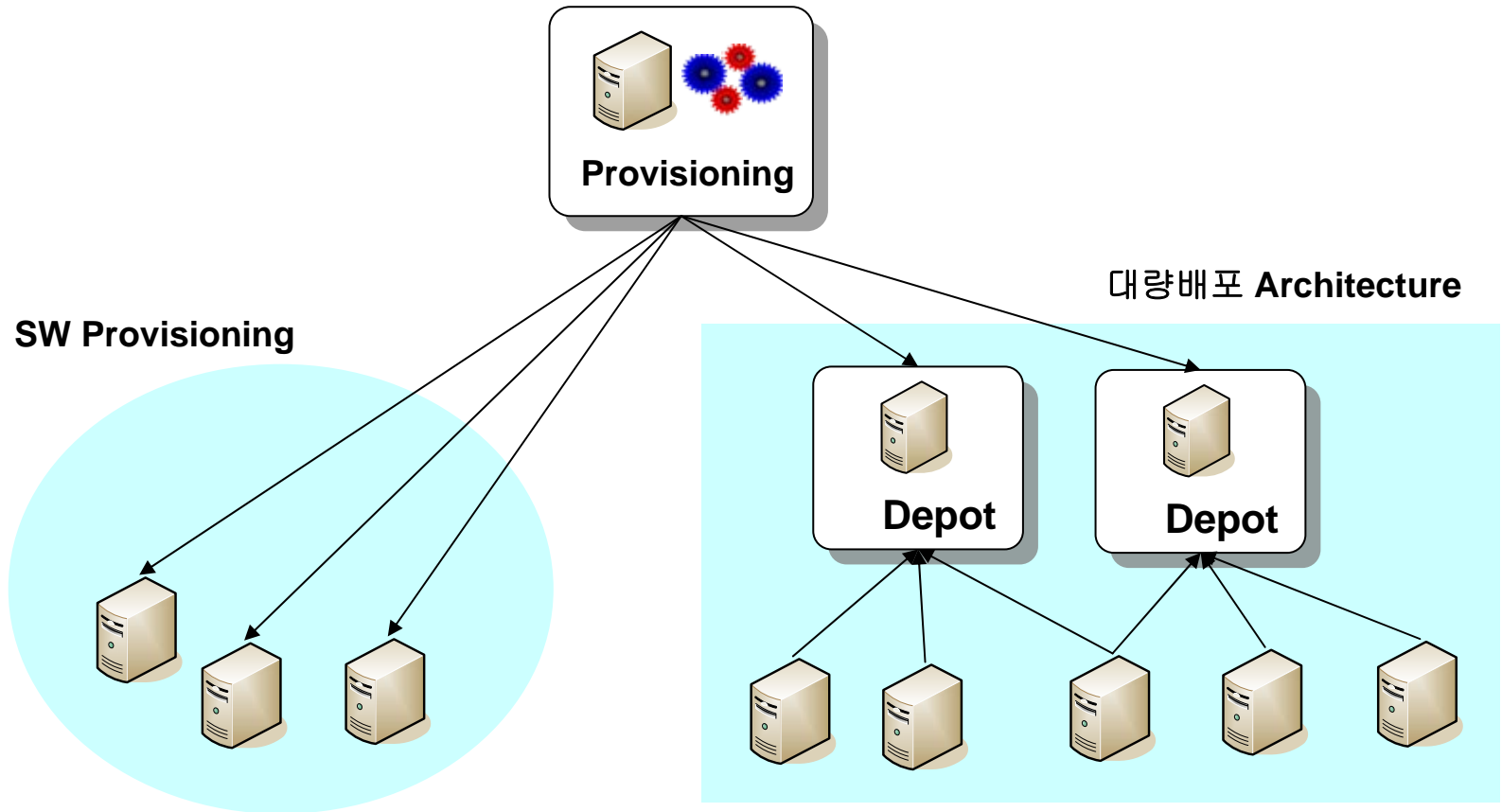


Provisioning > OS Provisioning

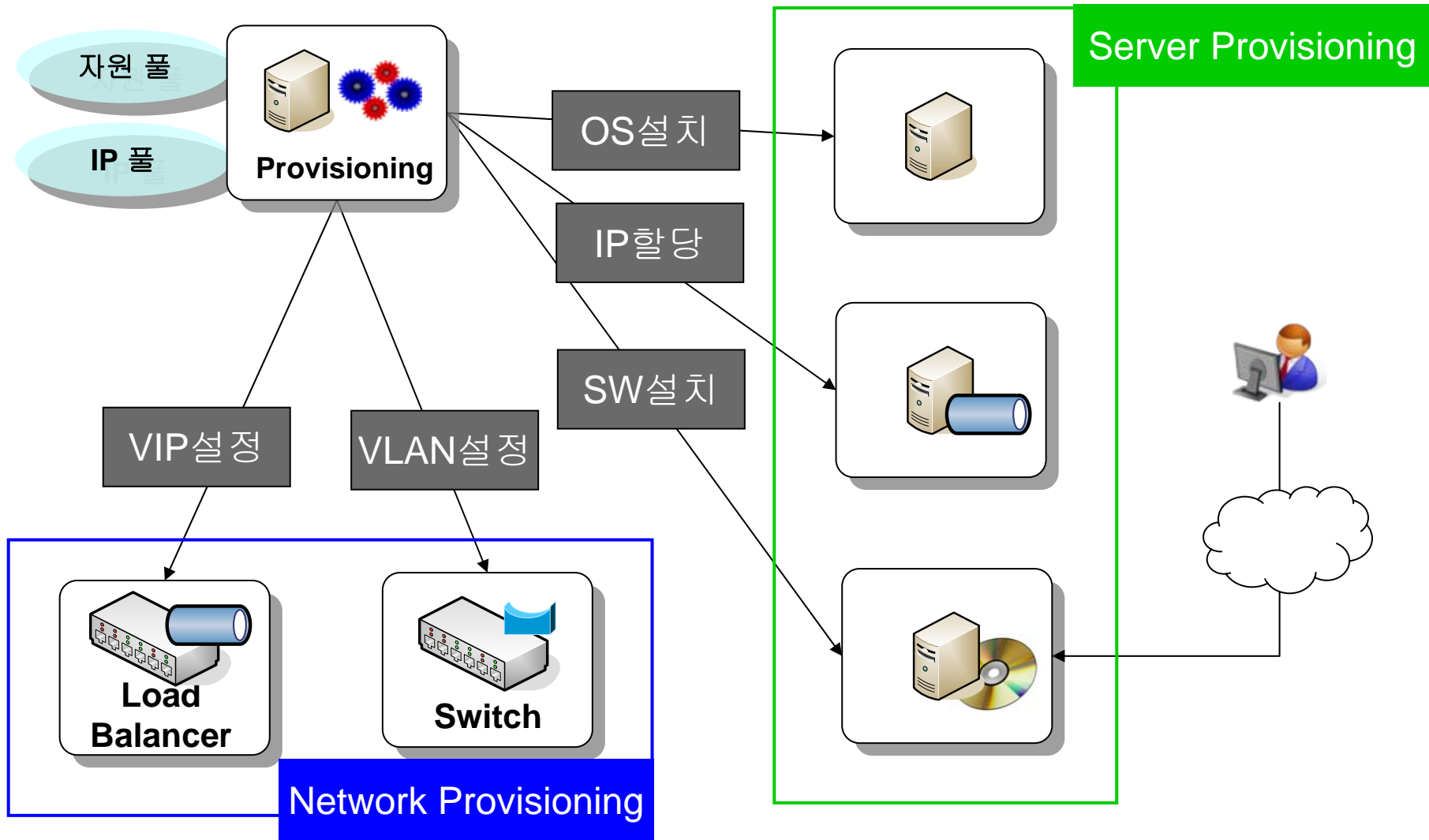


Provisioning > Software Provisioning

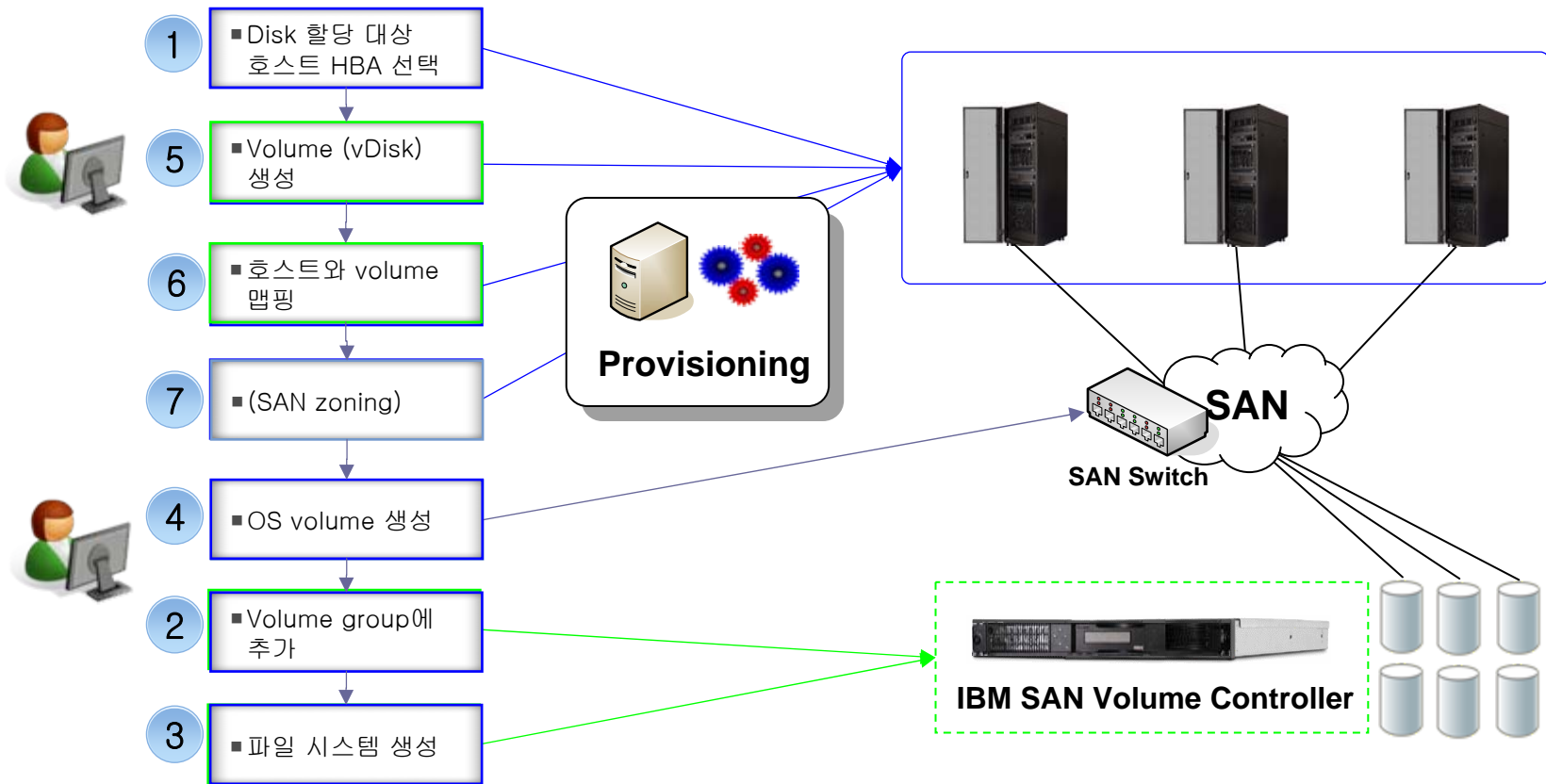
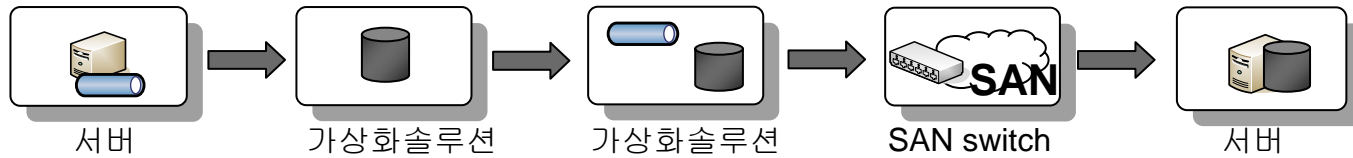
- SW Distribution : 단순 SW 설치, 대량 배포
- SW Provisioning : SW 설치 및 설정. RDBMS, WAS 등.



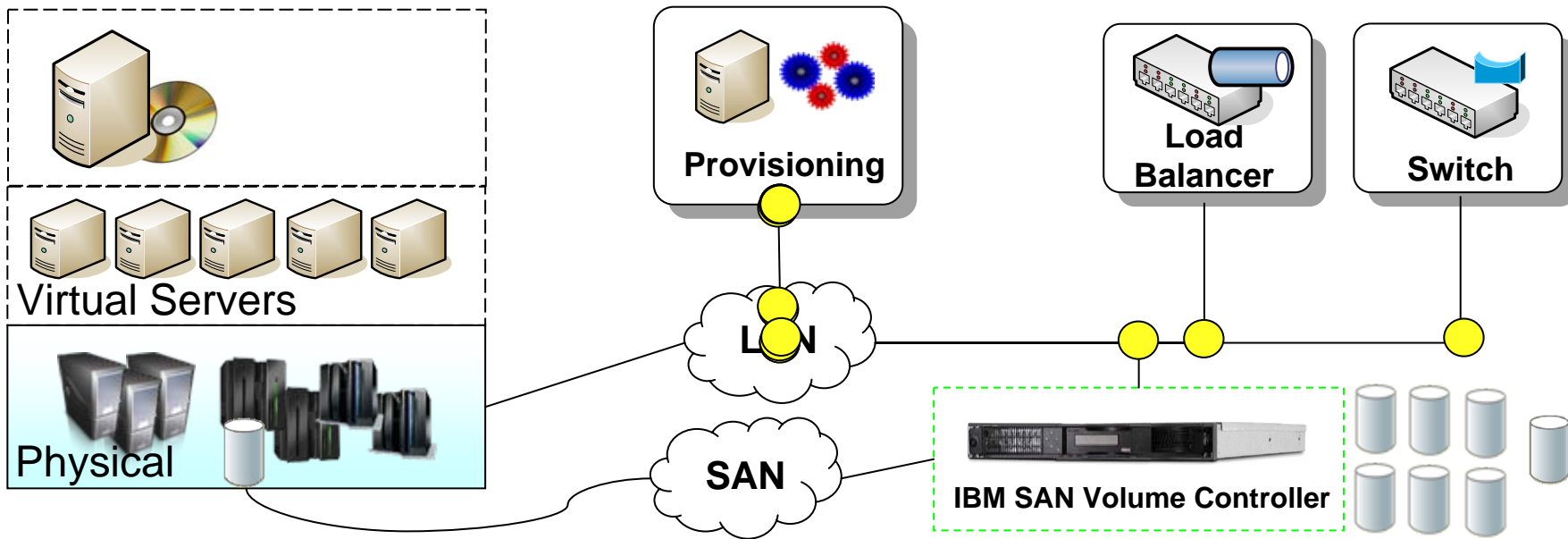
Provisioning > Server Provisioning



Provisioning > Storage Provisioning



Provisioning > End-to-end Provisioning



가상서버 생성 및 자원 조정

(가상화 호스트 **Disk** 추가 및 설정)

OS 설치 / IP 할당

Software 설치

Switch 설정

Load Balancer 설정

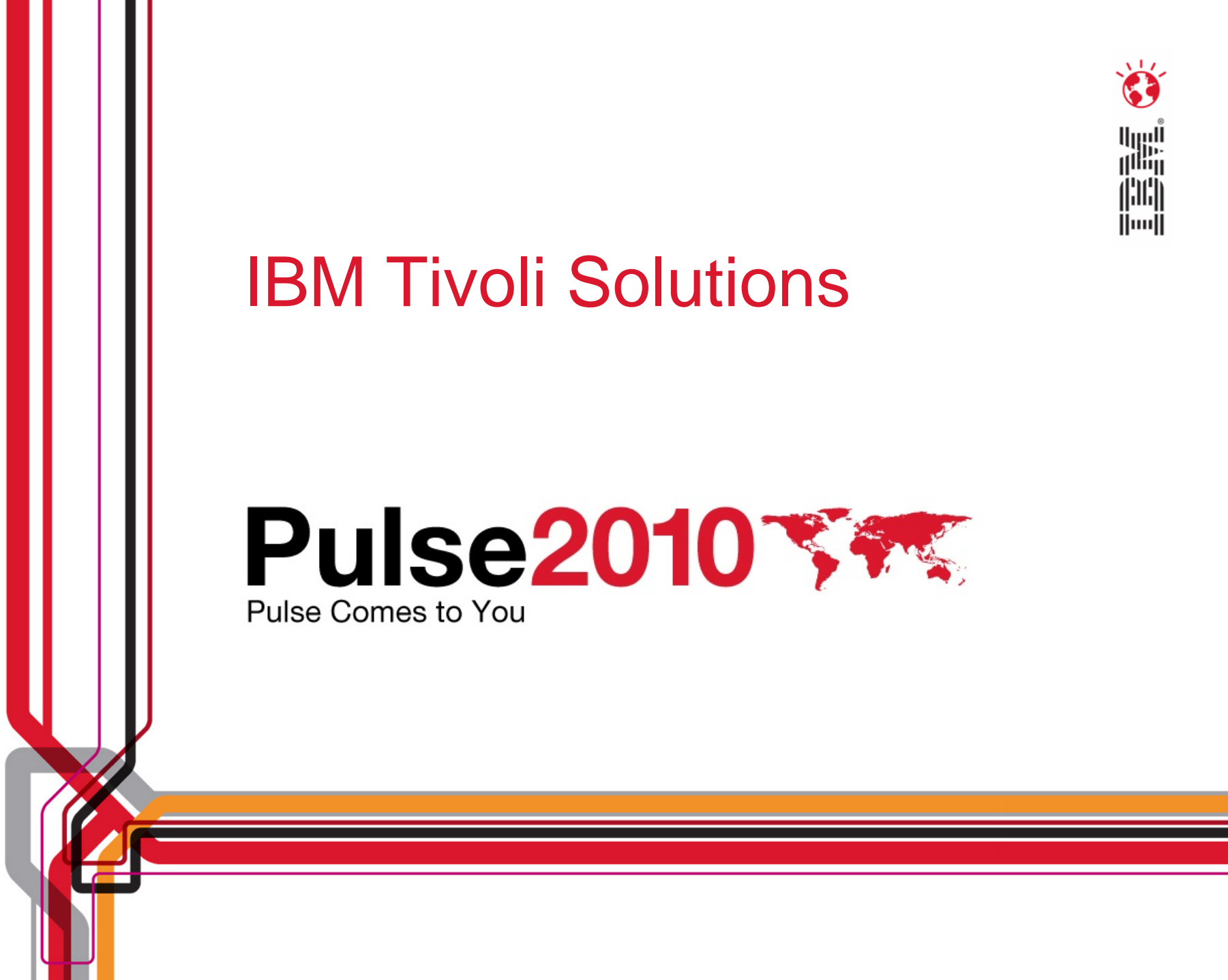
	가상화관리		OS provisioning		SW provisioning		NW provisioning		Storage provisioning
Server Provisioning									



IBM Tivoli Solutions

Pulse2010 

Pulse Comes to You



IBM Tivoli Solutions

Cloud Management Platform

모니터링	Discovery	Provisioning	ITSM	Cloud
<ul style="list-style-type: none"> •Tivoli Monitoring Family 	<ul style="list-style-type: none"> •Tivoli Provisioning 	<ul style="list-style-type: none"> •Tivoli Provisioning 	<ul style="list-style-type: none"> •Tivoli Service Request Manager 	<ul style="list-style-type: none"> •Tivoli Service Automation
모니터링	Discovery Application Dependency Discovery Manager	Provisioning	ITSM	Cloud

IT 인프라 Virtualization



Virtual Servers



Virtual Storage



Virtual Networks

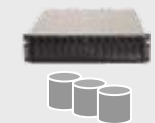
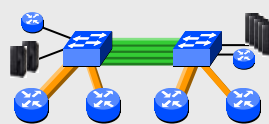


Virtual Applications & Middleware



Virtual Clients

IT 인프라 Physical Layer





Pulse2010

Pulse Comes to You

