

# SYSTEM TRANSITION TO CLOUD

TOMÁŠ DOŠEK

Product Manager - Customer Experience and Enablement

## CONTENT

CONDITIONS FOR MIGRATION TO CLOUD
PHYSICAL TO VIRTUAL
VIRTUAL TO VIRTUAL
HYBRID CLOUD

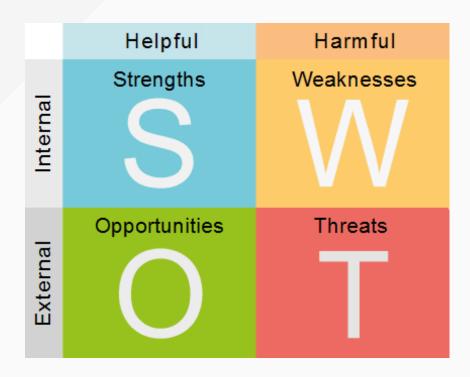
# BEFORE TRANSITION BEGINS

#### IT'S NECESSARY THINK OF

- Does the IT environment really need to transition to cloud?
- Market analysis
- IT analysis
- Cost analysis
  - Including maintenance resources and distinct vendor offerings
- Risk analysis
- Transition plan

### MARKET ANALYSIS

WHAT WILL THE TRANSITION BRING



### IT ANALYSIS

#### TRANSITION FROM IT'S PERSPECTIVE

- Will serve as a base for defining rules for tendering process
- Should include current IT inventory
- Functional analysis of deployed applications
  - Libraries and their versions
- Functional requirements of existing applications (for instance smartcard support)
- The same for projected applications that are to be run in cloud
- Performance requirements
  - Certain cloud implementations provide power-per-vm performance worse than baremetal hardware

### **COST ANALYSIS**

#### **HOW MUCH**

- Based on IT assesment various vendors whose product match the needs are picked
  - Predefined cost mentioned on web pages, etc. is not fixed and many times can be dealt to much lower
- HW cost
- Maintenance cost
  - Someone has to maintain HW and software, updates, outages, SLA

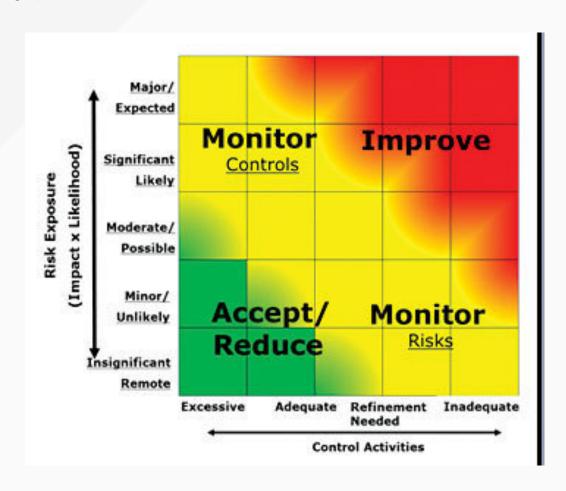
### RISK ANALYSIS

#### WHEN SOMETHING GOES WRONG

- HW
  - Estimate risk of fault for cloud components
  - Example:
    - Hard drive has a projected fault rate of 2% (depends on vendor: <u>PC World HDD</u> study), if your cloud consists of 40 TB of disk space in 512 MB drives (~80 drives) you'll annually lose almost 2 drives
- SW
  - Each upgrade poses risk
  - Enterprise applications show risk charts based on codebase changes
- Includes projected steps to minimize risks, or inventory of accepted risk factors

### RISK ANALYSIS

**SIMPLIFIED** 



### TRANSITION PLAN

#### **PLAN OF THE BATTLE**

- What migrates first, what is installed first
- What SLAs we need to keep
- Maintenance windows definition

### PHYSICAL TO VIRTUAL

#### **BAREMETAL TO CLOUD**

- Complete image of the disk is made
- Necessary changes are done to the image
- Image gets uploaded to cloud
- Tooling can make your life easy
  - Virt P2V

### VIRTUAL TO VIRTUAL

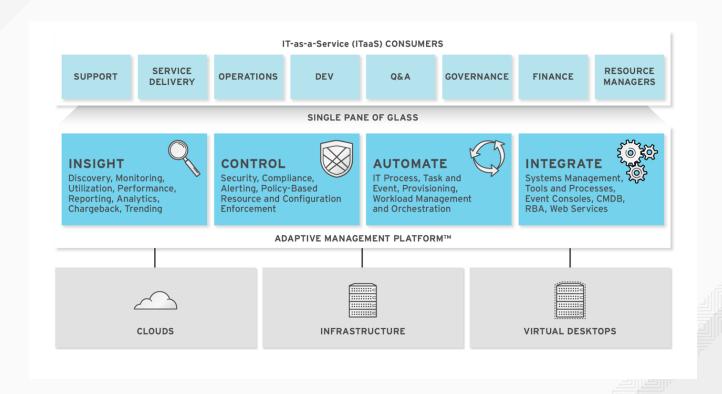
#### WHEN YOU ALREADY RUN DATACENTER VIRTUALIZATION

- Datacenter Virtualization (sometimes mistakenly called private cloud)
- Complete image of configuration for VM is transitioned
- Disk conversion happens in case of migration between hypervisor types
- Tooling can make your life easy
  - Virt V2V

### HYBRID CLOUD

WHEN YOU NEED TO SMOOTHLY TRANSITION BETWEEN PRIVATE/PUBLIC CLOUD

normal text



## QUESTIONS?

