



# NOODPAKKET VOOR IT'ERS

## Storage as a Service

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Bedrijfsnaam : Sun Microsystems Inc.

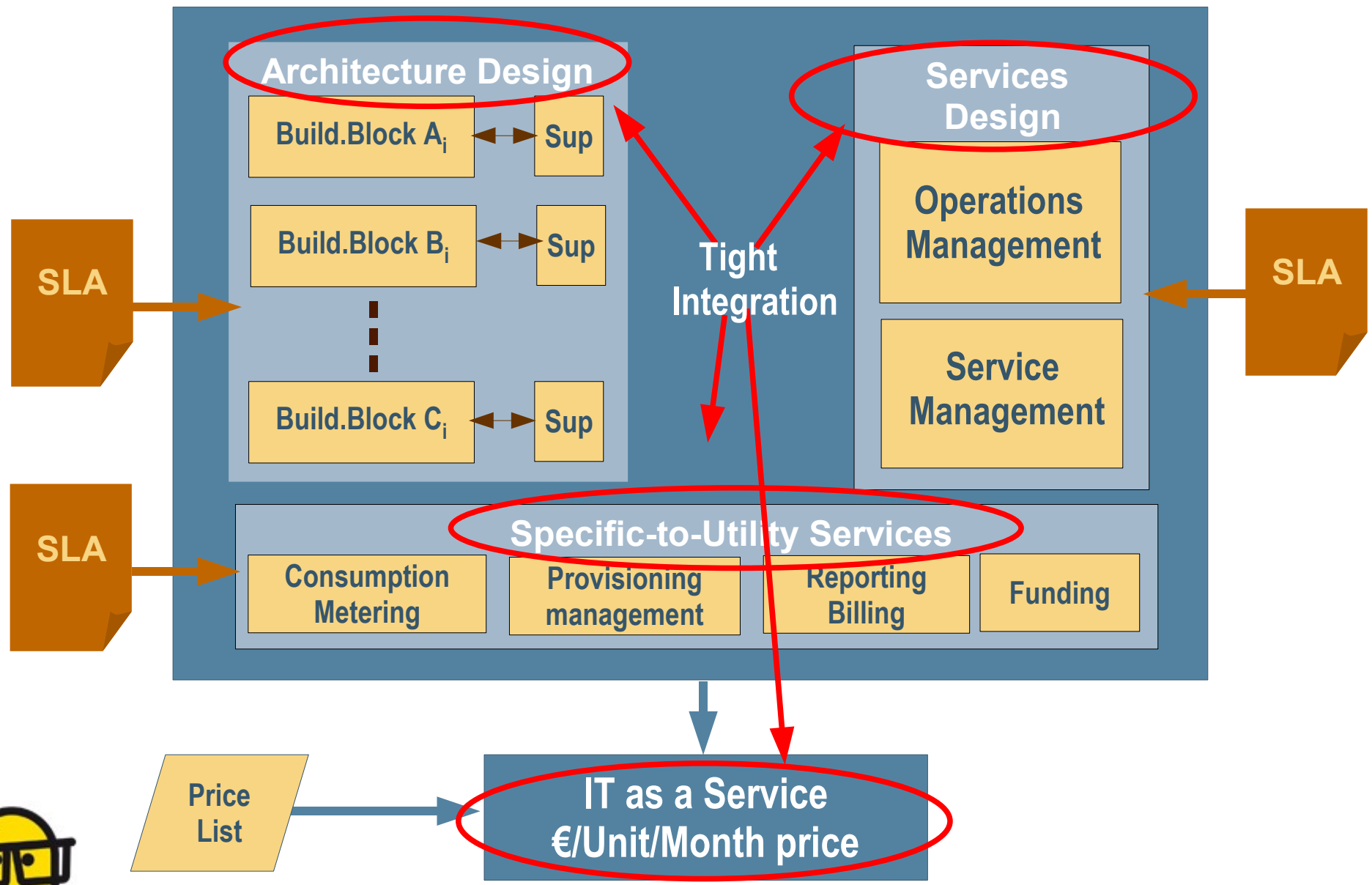
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# Private Storage Utility : Scope definition

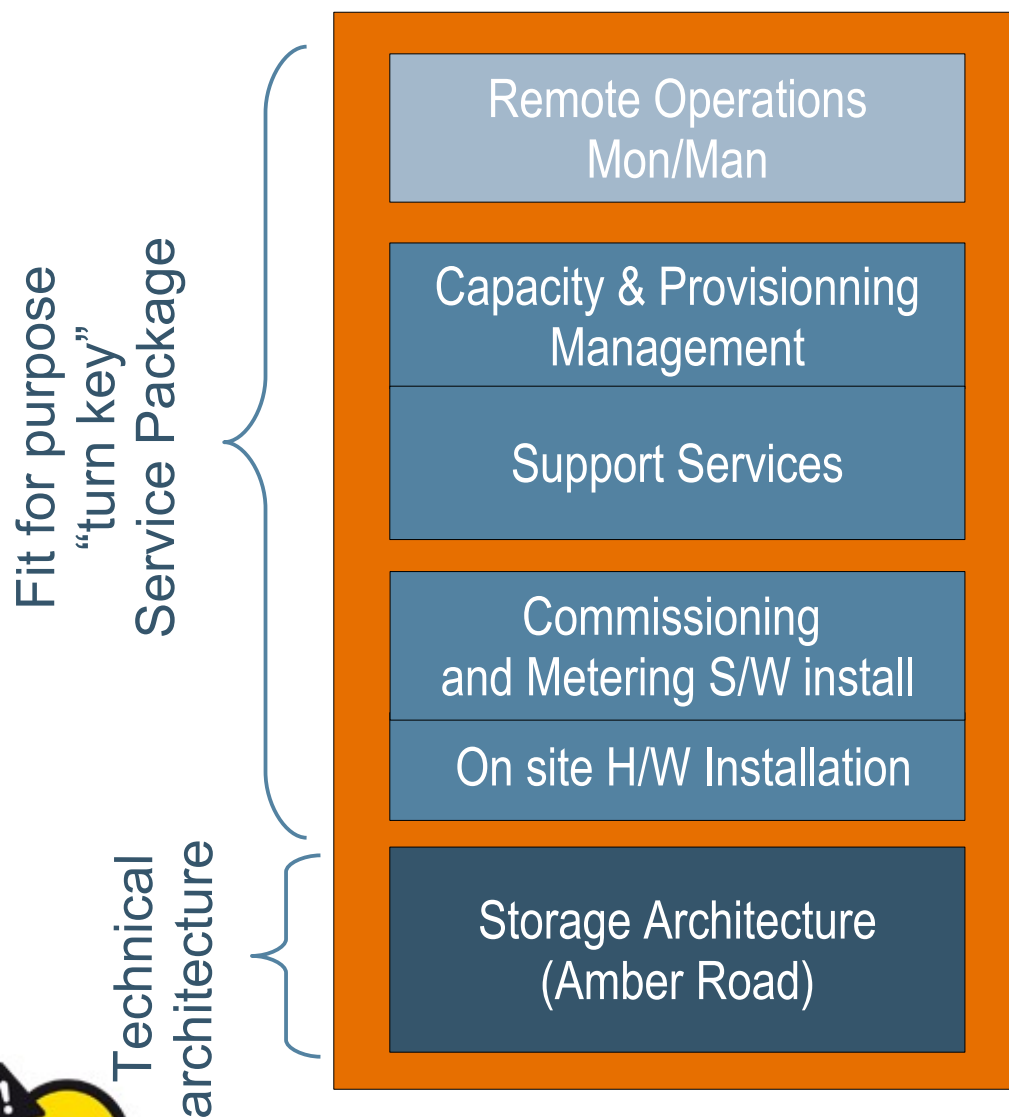
- **Typical Customer Requirements**
  - > Buy Storage as a Service (3-5 year contract)
  - > Online Storage (SAN, NAS, HighEnd) + Backup & Archive
  - > Request for Utility-type financial Model (Fixed + €/Gb/Month)
  - > Pricing model for various growth scenarios (e.g. x,y,z% QoQ)
- **Good Fit if :**
  - > Technical architecture built on Sun Storage products
  - > Can be operated and supported by Sun (ROM)
  - > Evidence of GB capacity consumption growth on the long term
  - > Minimum capacity usage commitment
  - > Leasing-based financial model is OK
  - > TCO, flexibility and T2M are the key issues



# Fit-for-purpose integrated approach



# Building Blocks

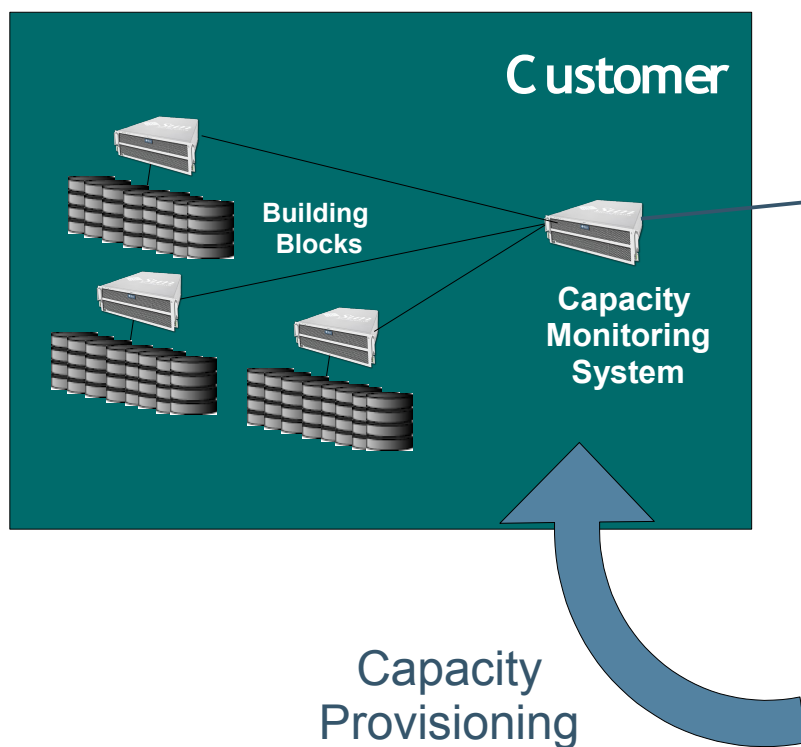


All incremental capacity comes in Building Blocks :

- ✓ ready-to-use
- ✓ smoothly deployed
- ✓ fully commissioned (S/W)
- ✓ monitored (uptime, utilization)
- ✓ maintained (break fix)
- ✓ tracked (asset & capacity)

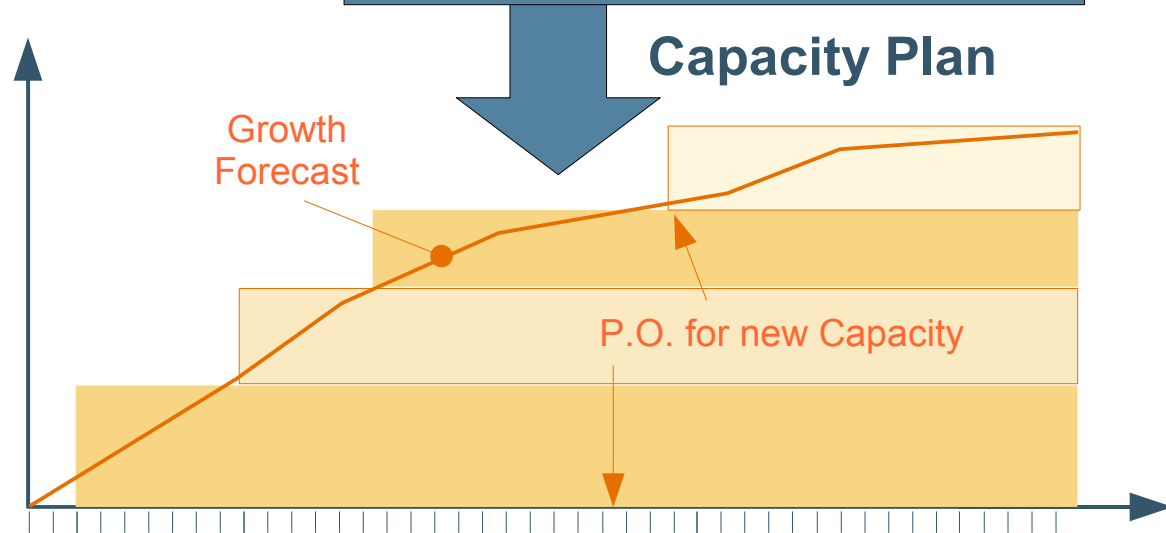


# Capacity Management



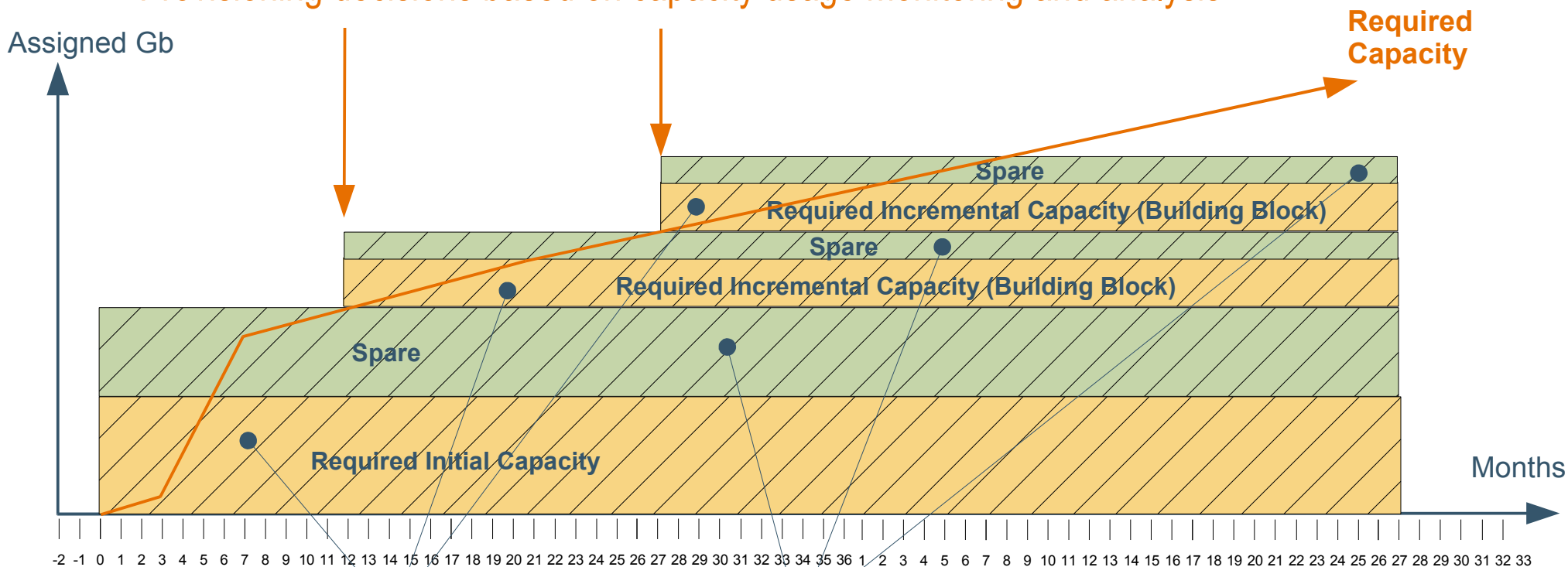
- **Customer interface**
  - ✓ SLA, Escalation Management
  - ✓ Contract Management
- **Operations Management**
  - ✓ Overall Quality assurance &
  - ✓ Continuous Improvement
- **Capacity & Provisioning Management**

- **Building Blocks deployed**
  - Include spare headroom capacity
  - Planned only N weeks in advance
  - H/W installed within X hours
  - Remotely commissioned



# Provisioning and Charging

Provisioning decisions based on capacity usage monitoring and analysis



Minimum commitment is based on projected growth, installed when needed

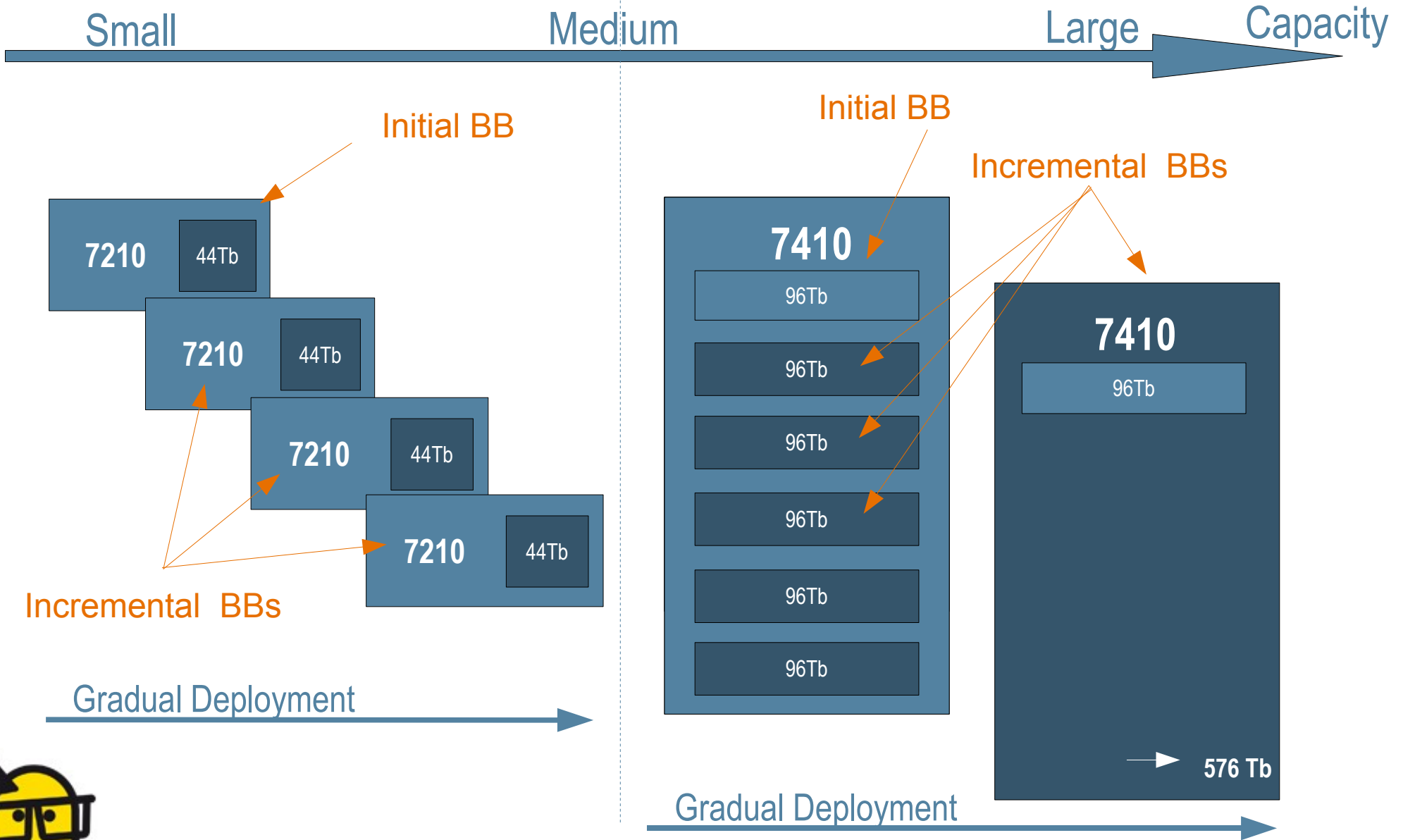
Variable billing within spare capacity

### Notes

1. Not drawn to scale.
2. Consumption unit = raw GB assigned to a "user"



# Example of gradual deployment



# Pricing Model

- Define “Classes” of “Storage Services” based
  - ✓ Technology (features, performance)
  - ✓ SLA (operations)

Each Class has a “Managed GB” cost associated

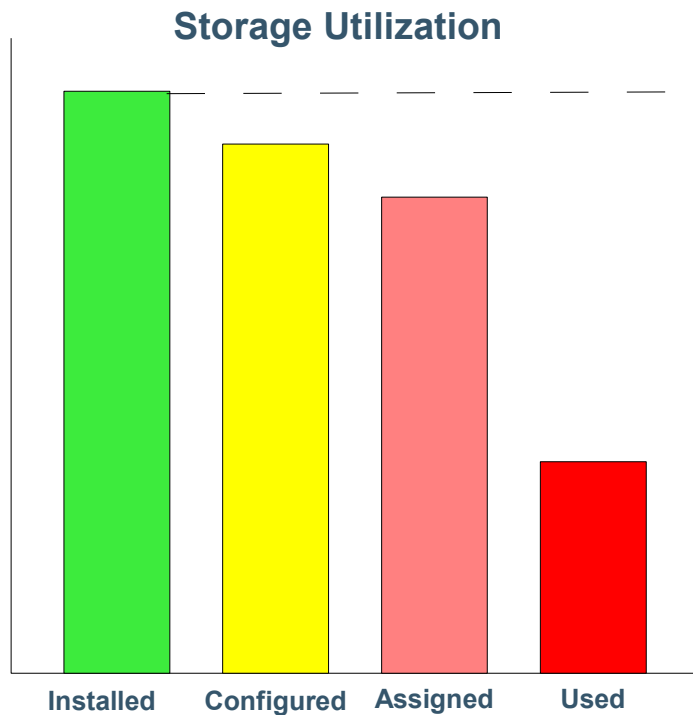
For each Class of “Storage Service” :

- $\text{Price-per-GB} = \text{Cost (Managed GB)} / \text{GB capacity}$
- Monthly charge =  
(Fixed Min GB + Variable GB used this month) \* Price-per-Gb



# Consumption Metering

- The Capacity Unit and The Billing Units need to be clearly defined to fit with the business model.
- Metering tool and process to be designed to support that definition.

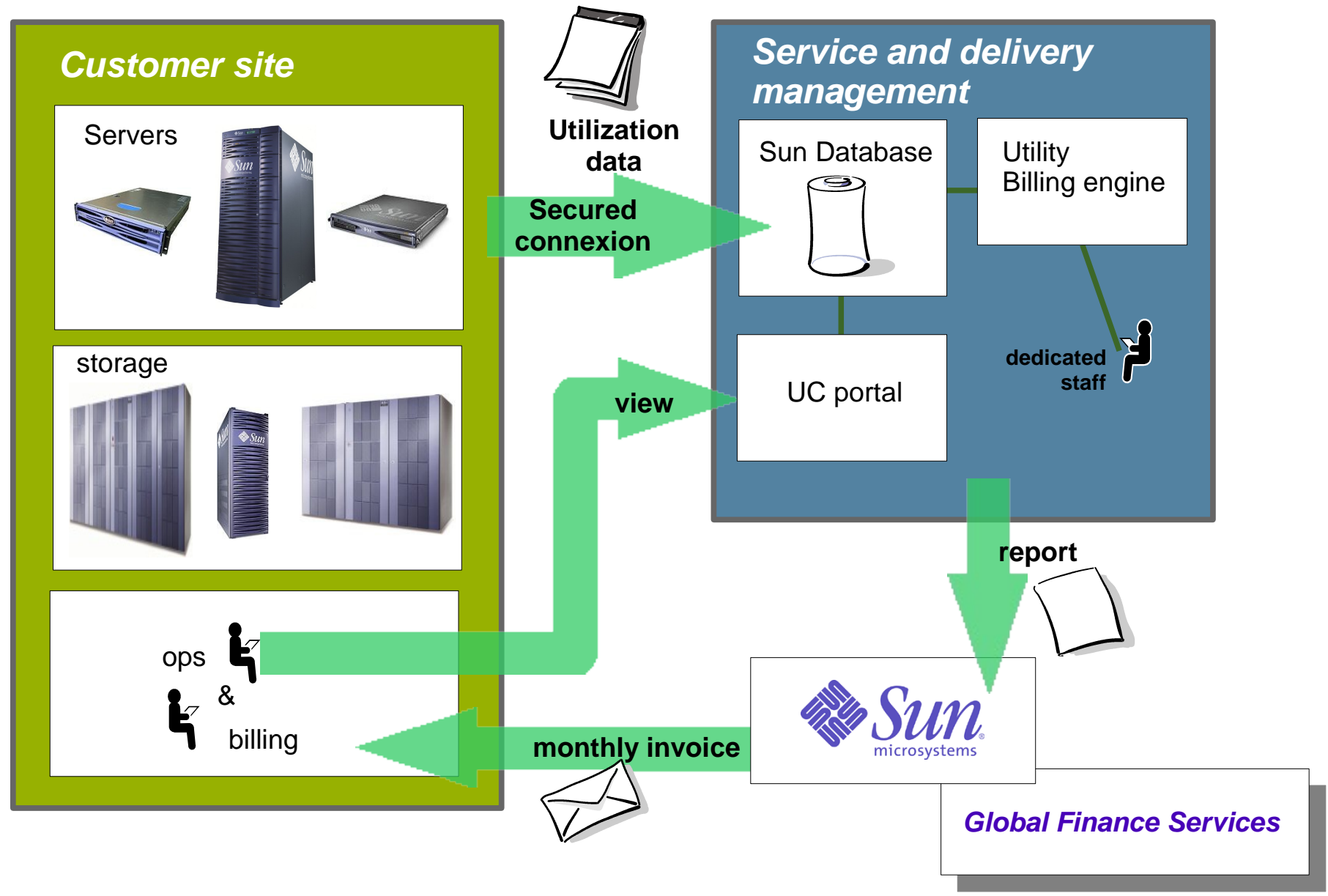


## Different ways to measure a storage estate

- Installed/Raw : Actual disc capacity installed in storage arrays
- Configured : Space available after RAID is applied
- Assigned : Space actually provisioned to an application, a database or a “user”
- Used : Volume of actual data stored



# Funding, Reporting & Billing



# Private Storage Utility Reference

**Industry** : Automotive

**Revenue** : \$50M+ over 4 Years

**Competition** : HP, IBM, ...

**Sun Products** : SAN + Managed Services

**Solution** : Fully Outsourced Managed Storage Utility (aka Storage-as-a-Service) 4-year contract, with an “All-Inclusive” price/Gb/month

**Objective** : Sustain data growth from 0% to 125% per year with a simple model

## **Highlights** :

- Storage resources are provisioned based on capacity plans managed by Sun, and billed against consumption
- All HW products under Sun Finance lease contract
- Data Center operations provided Sun

## Sun Managed Storage Utility



# Q & A





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**THANK YOU !**

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