



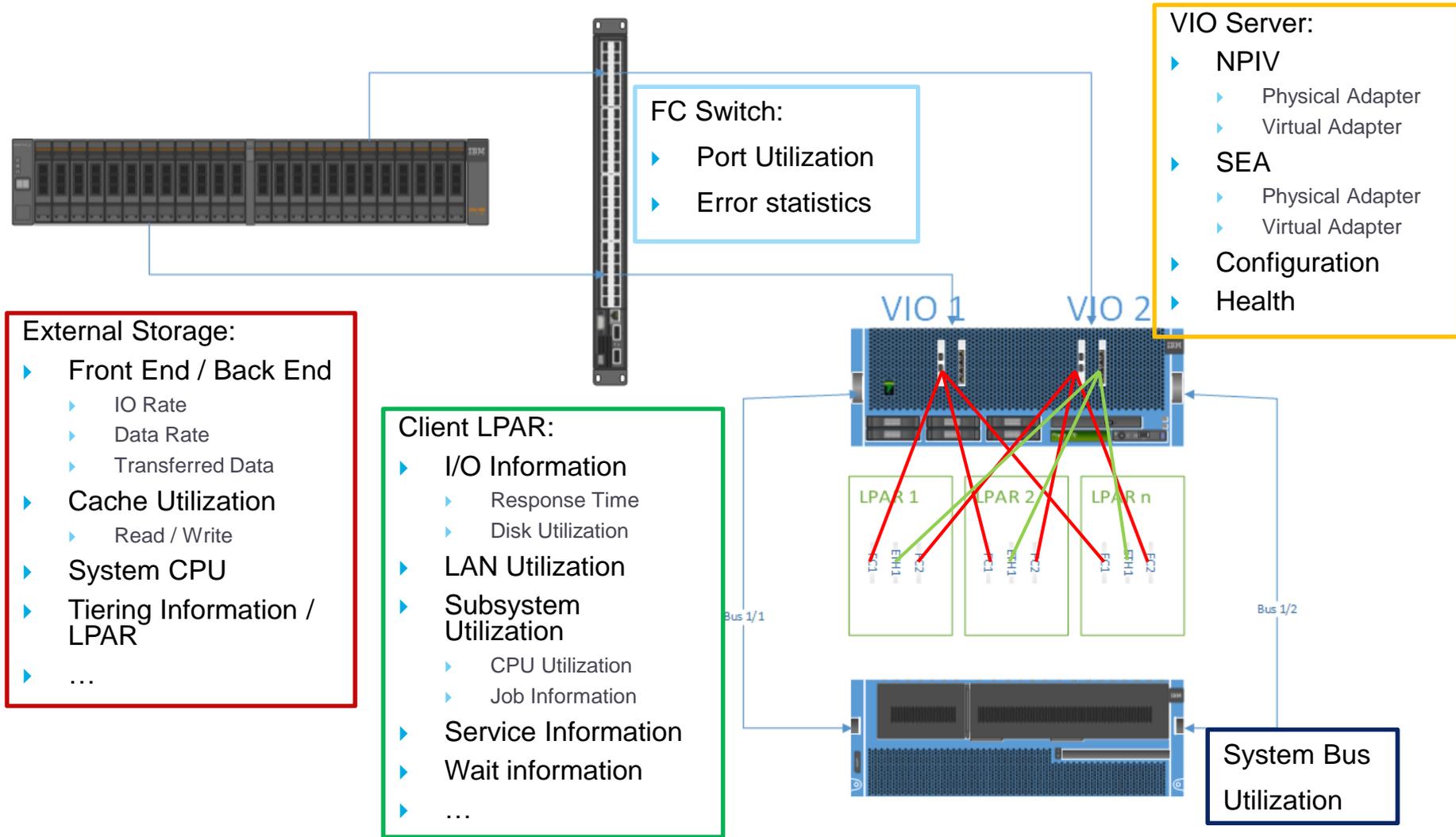
Performance Monitoring and more ...

IT-Power Services GmbH

Monitoring of a virtualized Environment

- ▶ Points of Interest
- ▶ Challenges
 - ▶ Economically
 - ▶ Technically
- ▶ Monitoring - Performance
 - ▶ Server
 - ▶ Storage
 - ▶ VIO Server
 - ▶ FC Switch
 - ▶ Client LPAR
- ▶ Monitoring - Availability

Points of Interest



Challenges - Economically

- ▶ How utilized is my current investment ??
- ▶ How many additional customers / environments can I move to the existing Hardware ??
- ▶ When will be the time for the next investment ??
- ▶ Which investment will deliver the best price / performance ratio ??

Challenges - Technically

- ▶ Monitoring of all potential bottlenecks
- ▶ Notification in the case of exceeding defined limits
- ▶ Monitoring of the virtualization layer
- ▶ Creation of Performance Graphs for Management as well as Customers
- ▶ Documentation of the Virtualization Layer

Monitoring (Performance)

- ▶ Top-Down Approach
 - ▶ Layer 1 (Impact to all client LPARs):
 - ▶ Power Server utilization (e.g. LPAR2RRD)
 - ▶ Storage Utilization

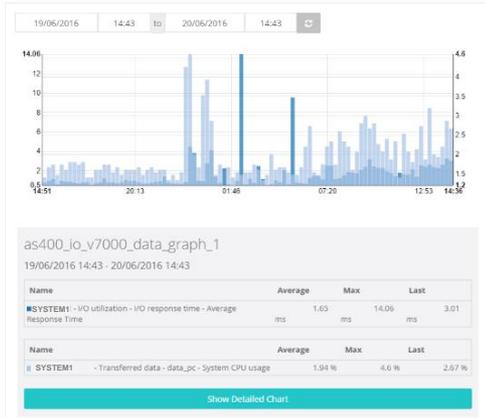
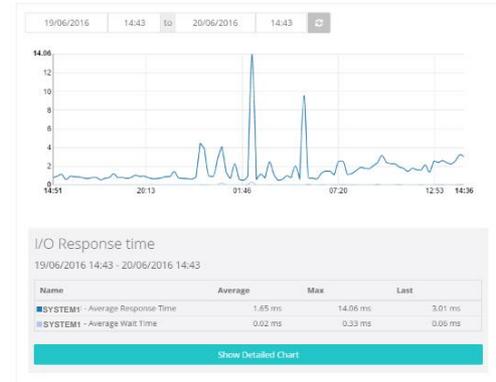
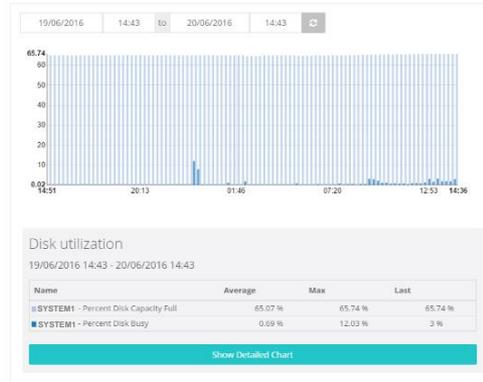
 - ▶ Layer 2 (Impact to “some” Client LPARs):
 - ▶ VIOs Performance Utilization (FC, SEA)
 - ▶ FC Switch Port
 - ▶ Power Server Bus Utilization

 - ▶ Layer 3 (Impact to one Client LPAR):
 - ▶ Client LPAR Utilization

Environment Overview

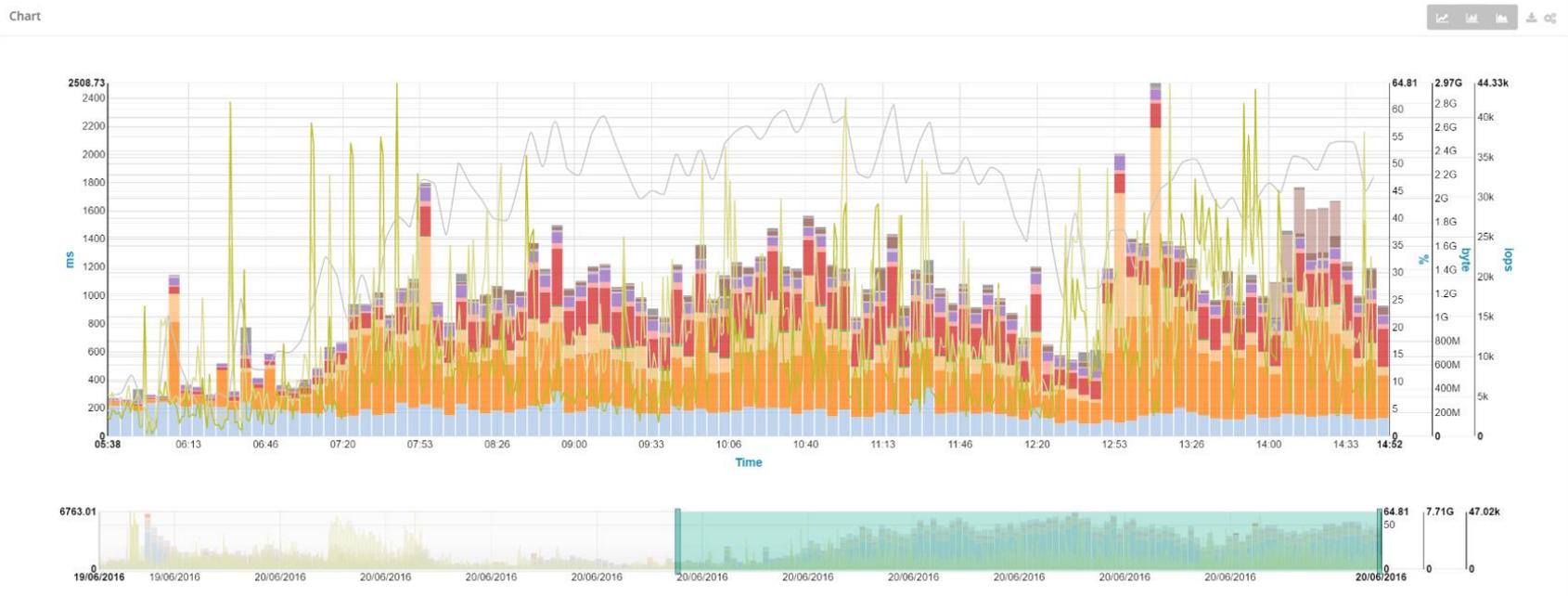
Pre Defined Graphs

- System Overview
- Servers Management
 - Sites Overview
 - CRUD Site
 - Servers Overview
 - CRUD Server
- Network View
- Events Overview
- Alerts Overview
- Operators Overview
- Roles Overview
- Charts
- Config Overview



► Modern graphical possibilities like e.g. mouse over, zoom, ...

Self Defined Graphs



- ▶ Possibility to Self Define Graphs based on current needs
- ▶ E.g. Mix performance information of different kind in one graph (e.g. 2 different systems)

SAN – Auto Discovery

- System Overview
- Servers Management
- Sites Overview
- CRUD Site
- Servers Overview
- CRUD Server
- Network View**
- Events Overview
- Alerts Overview
- Operators Overview
- Roles Overview
- Charts
- Config Overview

Network View

VIO Server

2 Items Selected

Aix

-- Select Items --

AS400 Server

2 Items Selected

Linux

1 Items Selected

V7000 Server

-- Select Items --

Tape-Library

-- Select Items --

SAN Switch

-- Select Items --

Windows server

-- Select Items --

Center Center Content Zoom In Zoom Out Zoom to Fit