STOR2RRD as a performance monitoring and reporting tool for 1.5 PB environment

One of the world’s largest logistic companies has decided to use Infrastructure as a Service (IaaS) for one of its key projects, instead of the classic CAPEX model (early of 2013). Storage architecture is based on the IBM System Storage portfolio - SVC, V7000 and DS8870. Appropriate resource evidence in such environment is a key success driver for provider of IaaS and for the consumer as well.

The overall storage landscape consists of 4x DS8870 (256 TB each), 10x V7000 (56TB each) and 32x nodes of SVC as a virtualization layer. The total capacity is over 1.5 PB (end of 2014)!

All LUNs from servers are accessible only via SVC.

One of the keystones of the whole IaaS service is to provide accurate reporting based on trusted and reliable data. The provider of IaaS has decided to use STOR2RRD as a reporting tool for accounting purposes and for performance monitoring and reporting. Consequently, this tool becomes the core platform for collecting all allocation and performance data (assigned LUNs to servers, flashcopy sources/targets).

Main goals were:
- collection of accounting data as a baseline for monthly invoicing (consumed resources)
- performance monitoring of physical storages as well as LUNs
- capacity planning and reporting

Once STOR2RRD with premium support was chosen as the reporting and monitoring platform, the provider started to work with developers of the tool on reports customizations. The customized reports enabled the customer to get all necessary inputs for managing costs, capacity and performance.

At the moment STOR2RRD provides all required reports automatically via the web interface and it is used on day to day basis for reporting and performance monitoring. Consumed HW resources are reported monthly (1 hour resolution time) and are further used for billing purposes.

In such a complex environment, this tool enabled both contract parties to keep the infrastructure utilized at reasonable level, providing accurate reports and evidence for invoicing, performance monitoring and future resource capacity planning.

Thanks to STOR2RRD it is now much easier to manage this project on daily basis. This tool provides all required reports and evidence online and retrospectively. It allows the customer to manage costs and performance up to the application landscape level.