# XORUX

# STOR2RRD

## Storage edition

**STOR2RRD** is a performance monitoring and capacity planning tool for **storage and SAN**, which monitors all your storage devices within one centralized console. All required information regarding your disk arrays, ports, pools, ranks, mdisks, volumes and drives are presented in a simple understandable form on your STOR2RRD console.

You can easily find out actual and historical performance data (to track issues and bottlenecks) and quickly respond to any performance problem.

It is able to aggregate performance information for group of volumes across your environment (regardless of storage unit).

| Monitored metrics: | Monitored logical and physical components: |
|---|---|
| <ul><li>IO rate</li><li>data throughput</li><li>response times</li><li>cache hits and usage</li><li>PPRC, IP replication</li><li>CPU utilization, compression usage</li></ul> | <ul><li>Ports</li><li>Pools (Arrays)</li><li>Ranks</li><li>Mdisks</li><li>Volumes (LUNs)</li><li>Drives</li><li>Hosts</li></ul> |

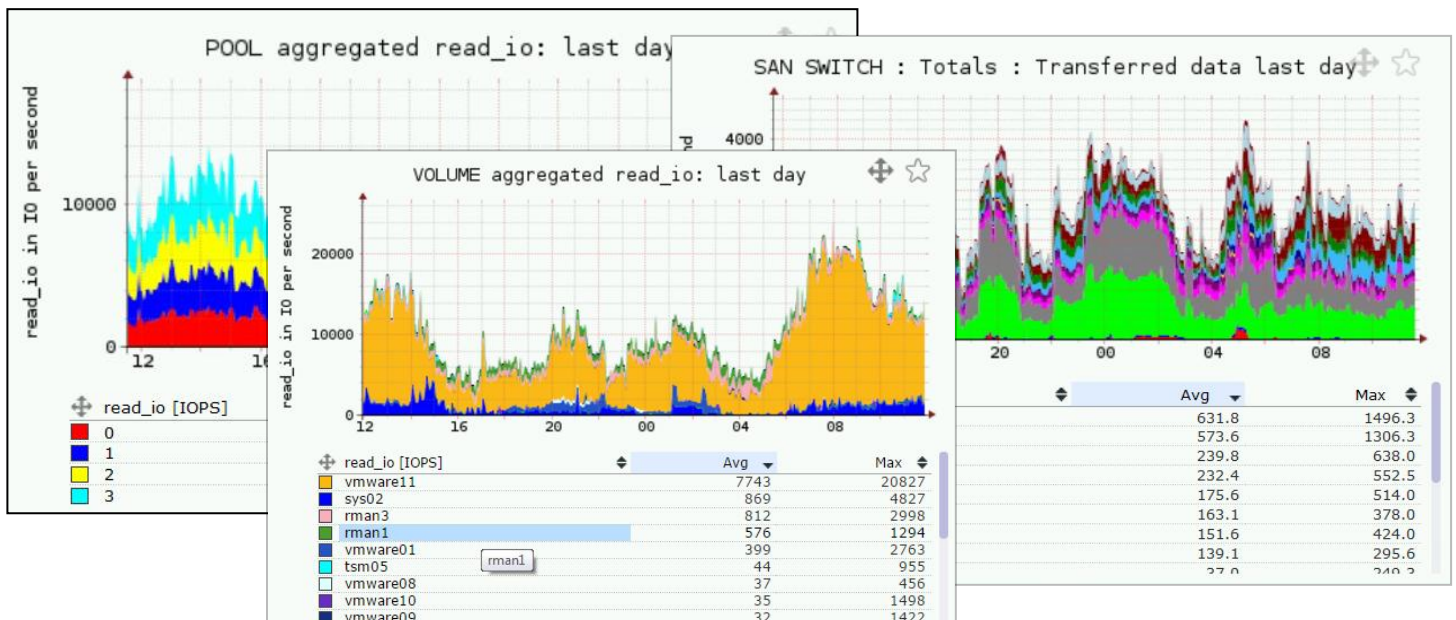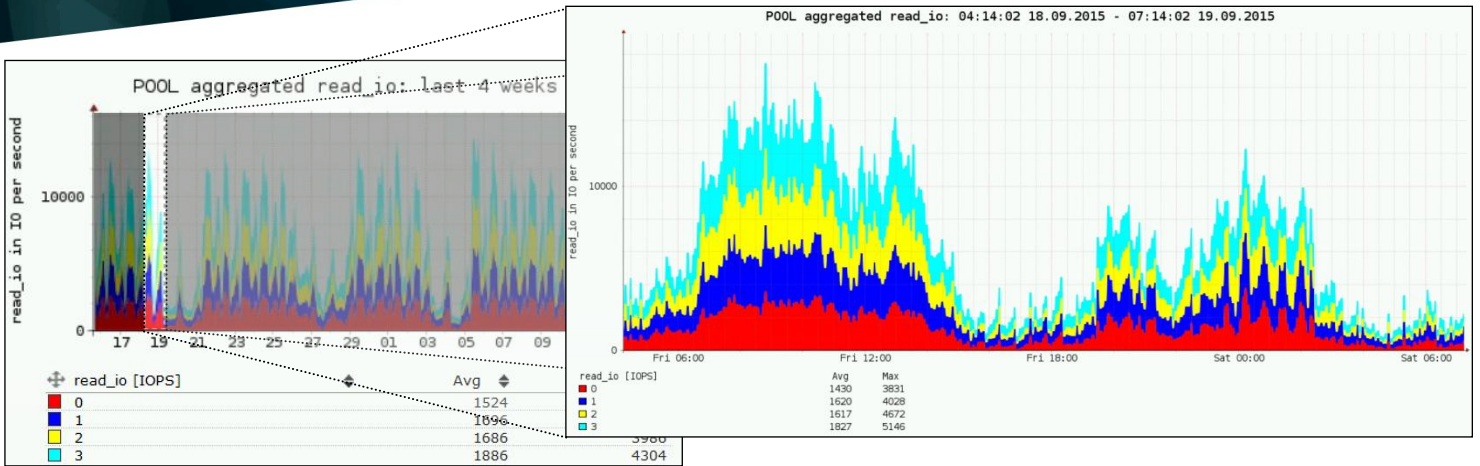| Currently supported storages: | |
|---|---|
| <ul><li>IBM Storwize V7000, V5000, V3700</li><li>IBM SVC</li><li>IBM FlashSystem V9000</li><li>IBM System Storage DS8000 and DS6800</li></ul> | <ul><li>IBM Spectrum Accelerate (XIV)</li><li>IBM Spectrum Virtualize</li><li>IBM DS3000, DS4000, DS5000 and DCS3700</li><li>LSI / Engenio based storages</li></ul> |

Actual supported devices can be found at the: http://www.stor2rrd.com/support_matrix.htm

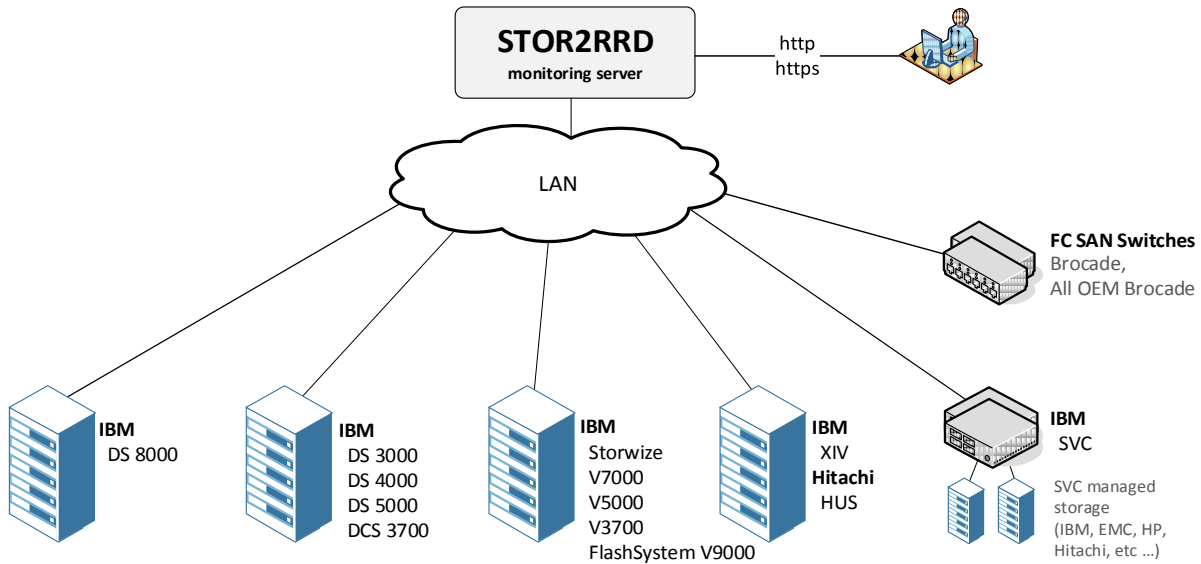| News in the latest version 1.20: | |
|---|---|
| <ul><li>IBM FlashSystem V9000 support</li><li>Capacity reports: capacity usage of all attached storages in one view</li></ul> | <ul><li>Alerting based on performance thresholds</li><li>Custom Groups: grouping utilization of volumes regardless where they are in one graph</li></ul> |

**On the following pictures, you can see some examples of graphs provided by STOR2RRD:**

**The following diagram describes how STOR2RRD collects data from monitored storages:**



STOR2RRD
monitoring server

http
https

LAN

FC SAN Switches
Brocade,
All OEM Brocade

IBM
DS 8000

IBM
DS 3000
DS 4000
DS 5000
DCS 3700

IBM
Storwize
V7000
V5000
V3700
FlashSystem V9000

IBM
XIV
**Hitachi**
HUS

IBM
SVC

SVC managed
storage
(IBM, EMC, HP,
Hitachi, etc …)

**STOR2RRD** tool is free software. You can redistribute it and/or modify it under the terms of the GNU General Public License v3.

We offer support of the product which brings you the following benefits:

- SLA: next business day response time for critical issues
- regular health checks
- priority in implementation of new functionality which the customer requests
- creating customized reports based on the customer's requests
- full version of the product contains:
  - Unlimited number of Volumes in one Custom Group

**Future planned enhancements:**
- support for EMC, Hitachi, HP and NetApp storages
- LPAR2RRD and STOR2RRD integration