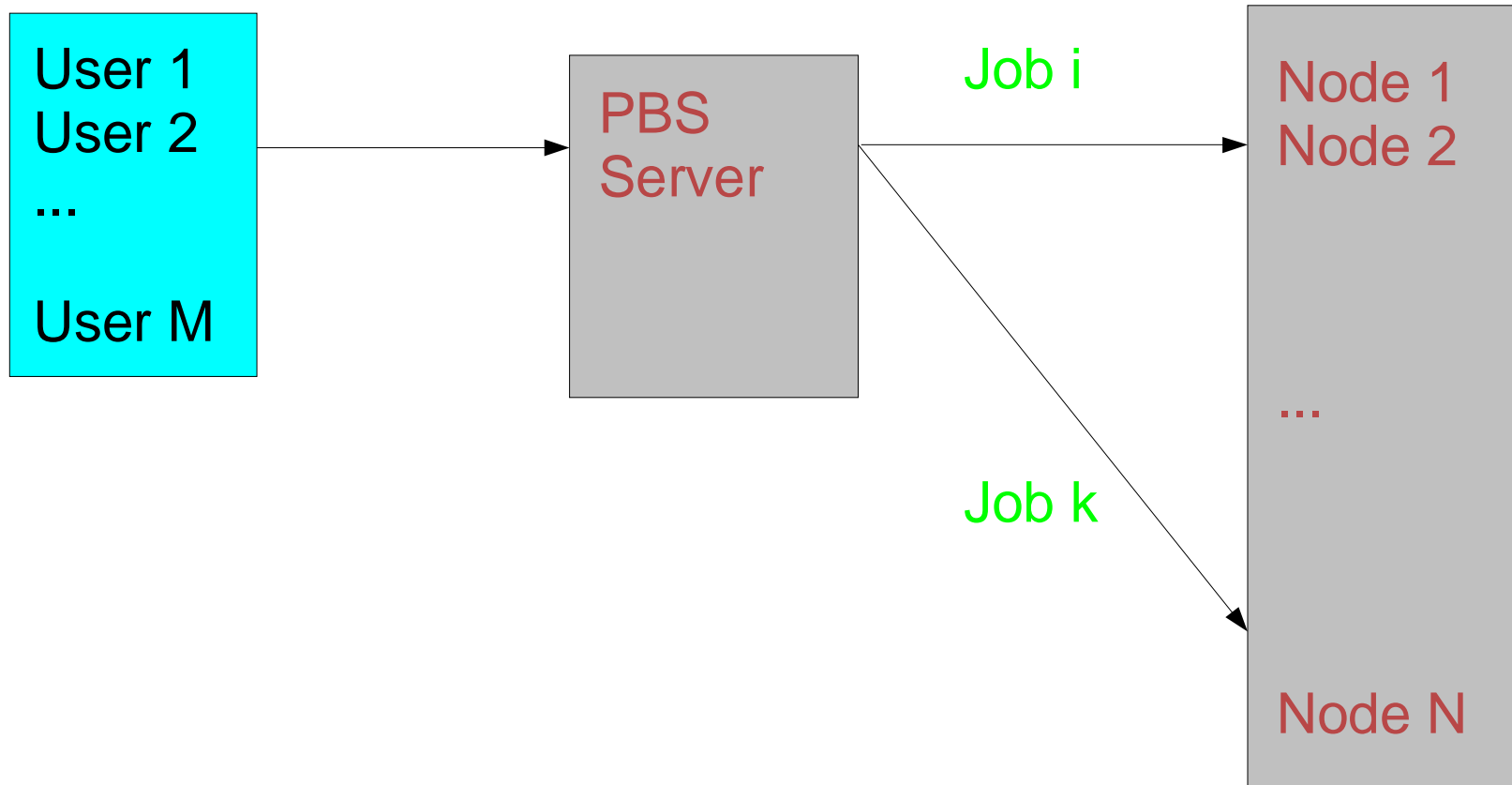


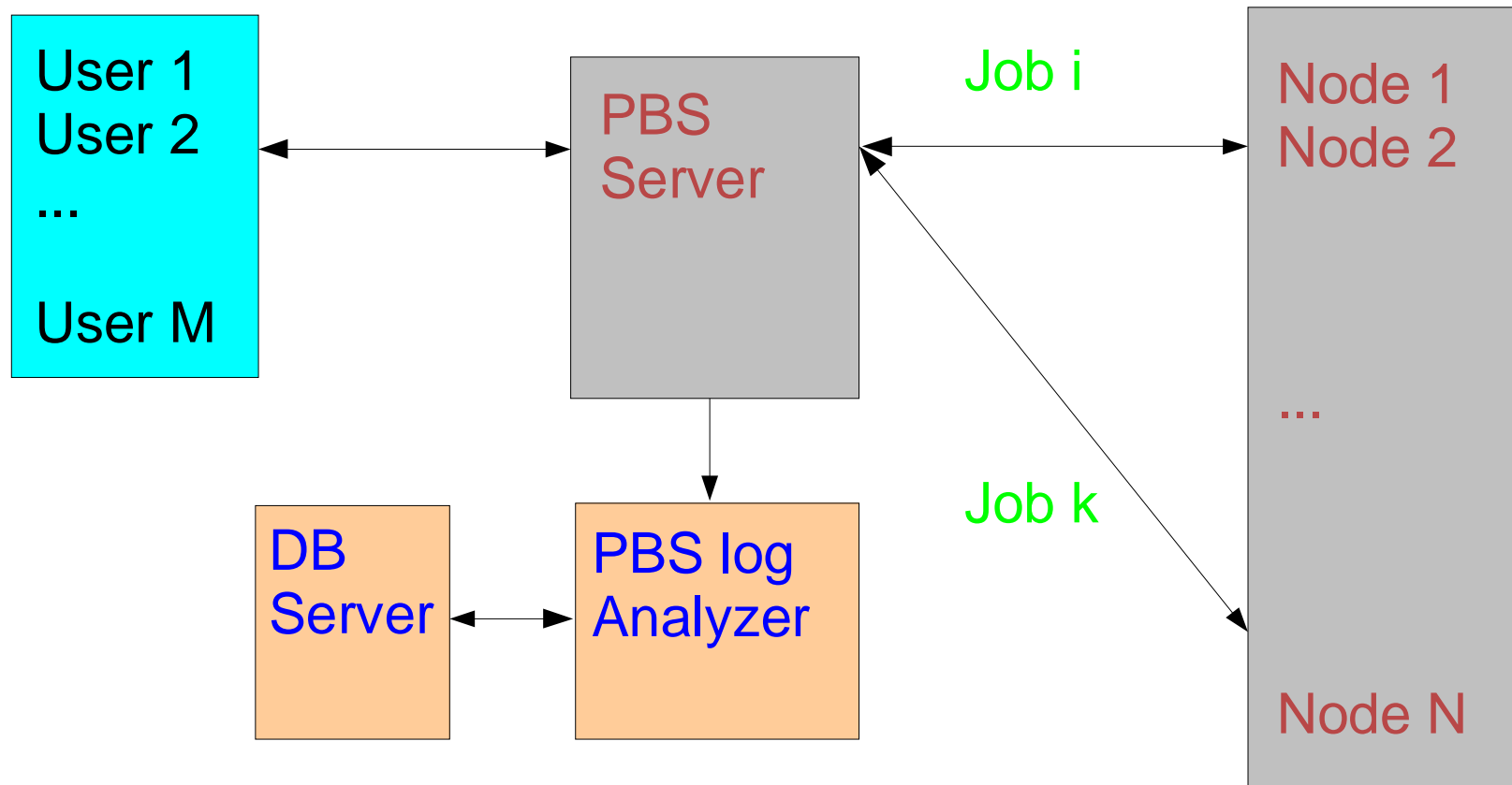
V.Kolosov, Monitoring System for OpenPBS
NEC'2003, Varna, Bulgaria

- Introduction
- Monitoring System Overview
- Demonstration
- Conclusions and Roadmap

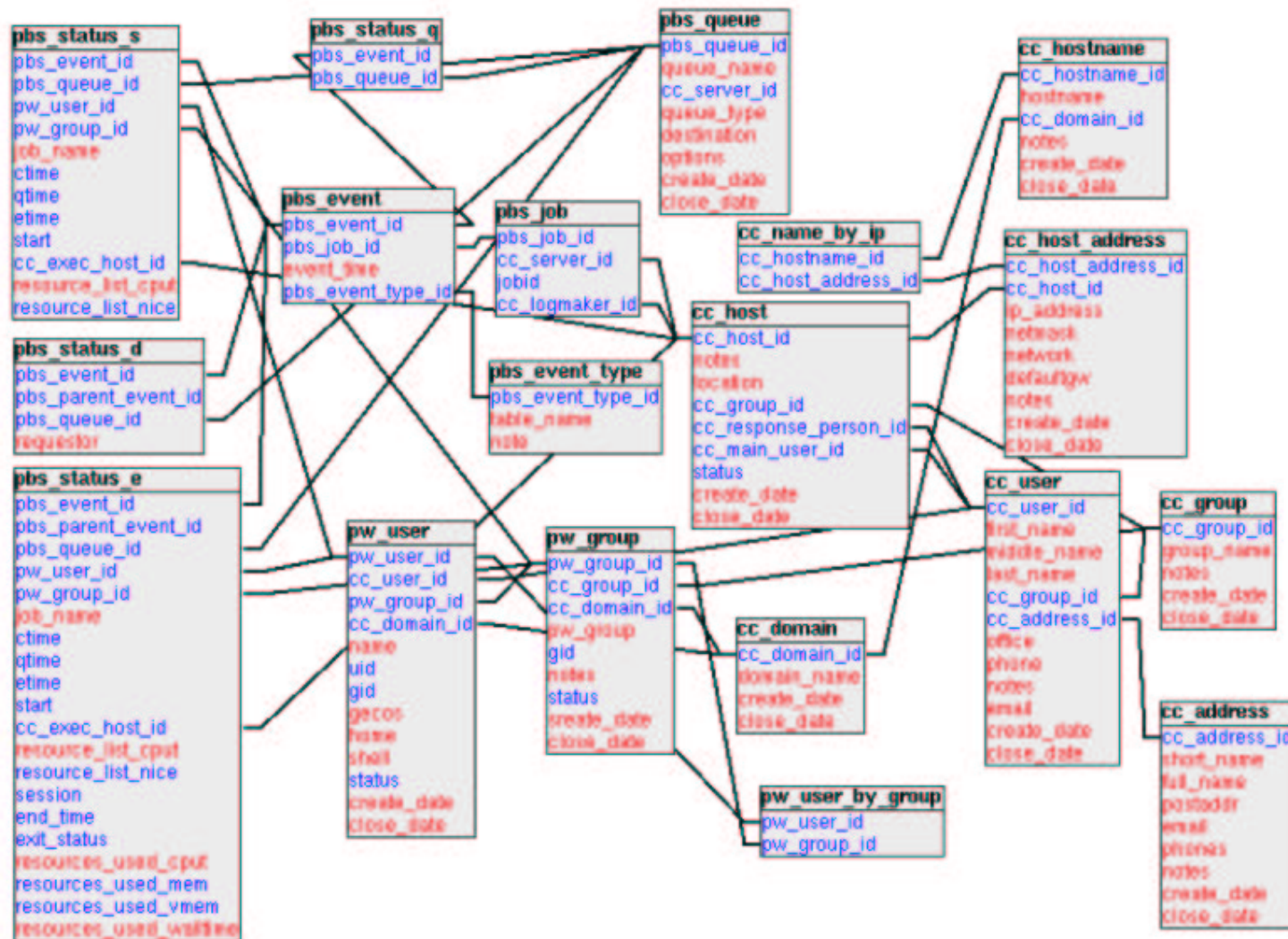
Batch System Scheme



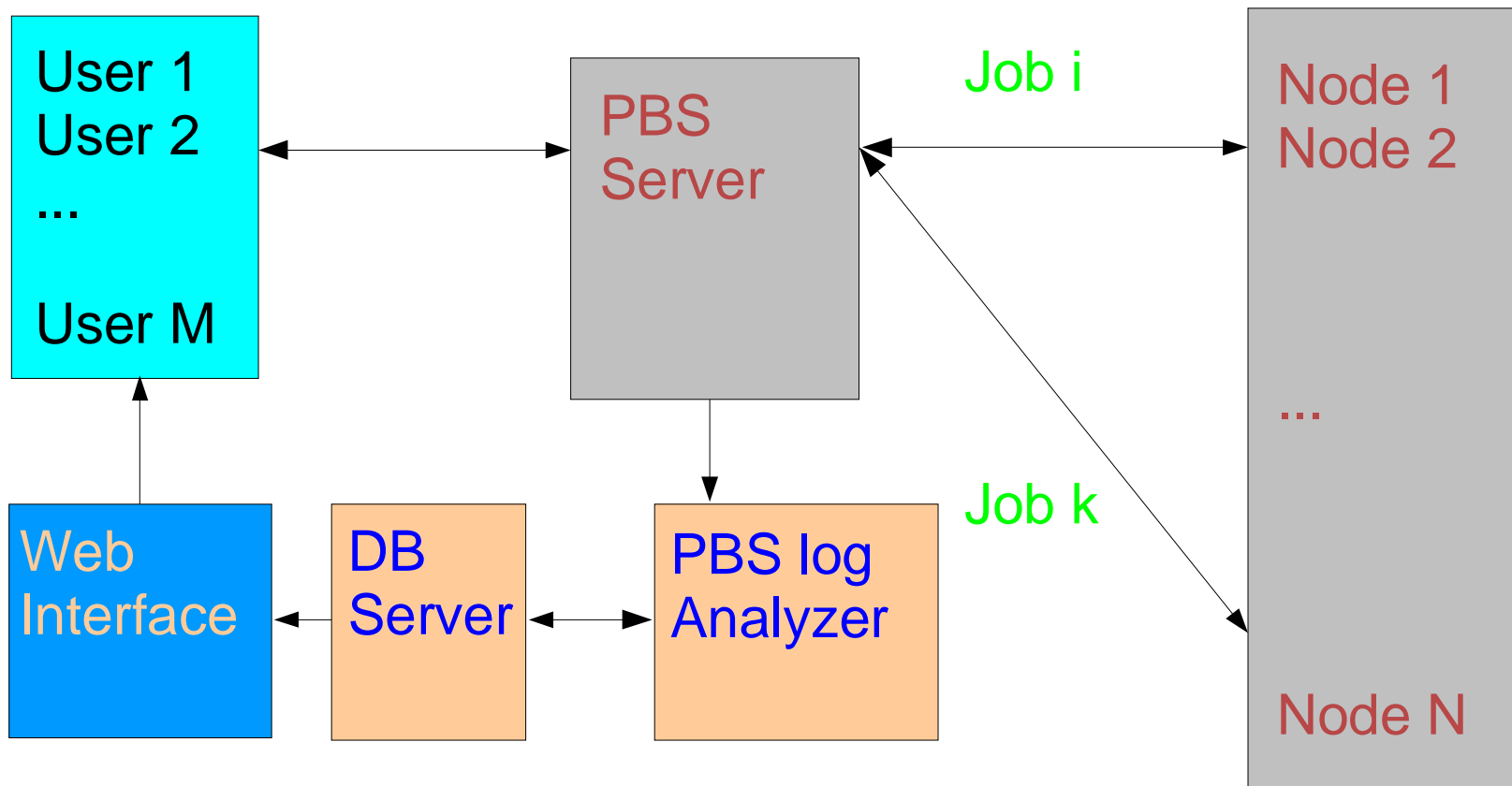
Monitoring System Scheme



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Monitoring System Scheme



Status of PBS on rrcsrv.itep.ru

Current status:

| Queue name | Queue type | Run | Queued | Run limit |
|-----------------|------------|-----------|----------|-----------|
| <i>rrc_main</i> | Route | 0 | 0 | -- |
| <i>short</i> | Execution | 1 | 0 | 16 |
| <i>long</i> | Execution | 4 | 0 | 32 |
| <i>medium</i> | Execution | 1 | 0 | 16 |
| <i>xxf</i> | Execution | 5 | 0 | 16 |
| Total | | 11 | 0 | -- |

Detailed statistics on

Tue Sep 16 19:04:44 2003

Integrated statistics per from

15 2002 to

16 2003

PBS statistics - Konqueror

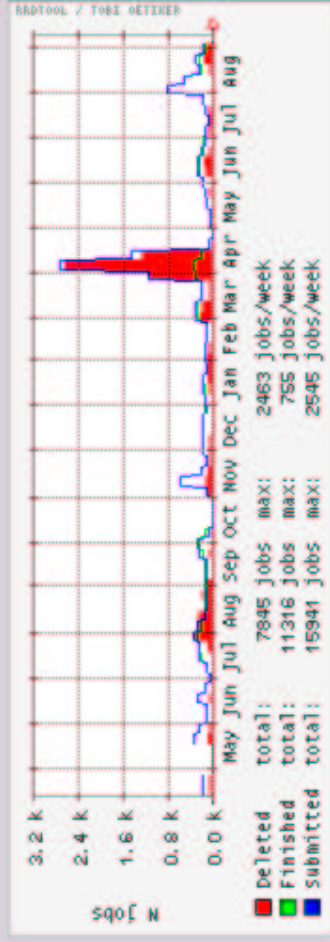
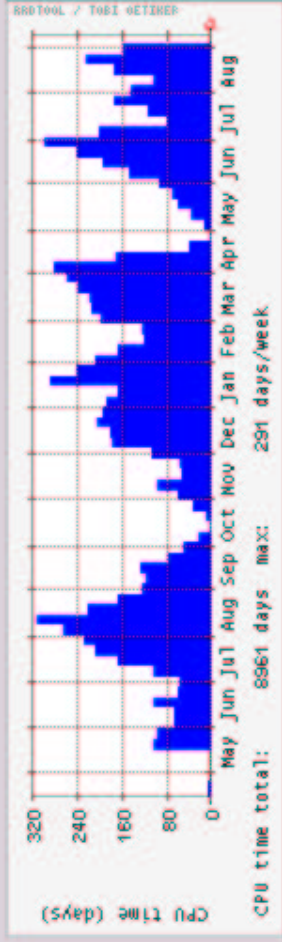
Адрес: [Правка Вид](#) [Перейти](#) [Закладки](#) [Сервис](#) [Настройка](#) [Окно](#) [Помощь](#)

Адрес: http://localhost/~kolosov/monitor/pbsview.cgi?type=full_stat&submit=Get+statistics

Status of PBS batch jobs on rrcsrv.itep.ru (Thu Sep 18 14:54:08 2003)

| Job ID | Job Name | username | Job Owner | Group | Node | Time Use | Status | Queue |
|--------|--------------|----------|------------------|-------|--------|-----------|--------|--------|
| 3462 | 50-strip.bat | matveev | Vladimir Matveev | SELEX | rrc000 | 284:04:18 | R | xxl |
| 3559 | 3183.bat | matveev | Vladimir Matveev | SELEX | rrc002 | 93:20:35 | R | xxl |
| 3580 | 15-strip.bat | matveev | Vladimir Matveev | SELEX | rrc015 | 154:40:55 | R | xxl |
| 3563 | test.csh | kolosov | Victor Kolosov | CMS | rrc003 | | R | long |
| 3564 | test.csh | kolosov | Victor Kolosov | CMS | rrc001 | | R | long |
| 3565 | test.csh | kolosov | Victor Kolosov | CMS | rrc014 | | R | long |
| 3566 | test.csh | kolosov | Victor Kolosov | CMS | rrc013 | 00:01:36 | R | long |
| 3567 | test.csh | kolosov | Victor Kolosov | CMS | rrc012 | | R | short |
| 3568 | test.csh | kolosov | Victor Kolosov | CMS | rrc011 | | R | medium |
| 3569 | test.csh | kolosov | Victor Kolosov | CMS | rrc010 | | R | xxl |
| 3570 | test.csh | kolosov | Victor Kolosov | CMS | rrc009 | | R | xxl |

Statistics of the PBS from Apr 15 2002 to Sep 18 2003 for rrcsrv.itep.ru



| Date | CPU Time | Submitted | Finished | Deleted |
|------------|------------------|-----------|----------|---------|
| 2002-04-18 | 17 days 14:38:41 | 514 | 514 | 52 |
| 2002-04-26 | 00:00 | 5 | 5 | 0 |
| 2002-04-30 | 18:19:11 | 3 | 3 | 0 |

Conclusions:

- It works! Monitoring system shown good stability during two years of operation in ITEP.
- Scalability is enough to monitor up to 100K jobs per day.

Roadmap

- Some of the developed mechanisms will be used in high performance monitoring system based on SQL DB to replace MRTG or RRD tools.
- PBS Log parser and DB writer will be separated in the future release to provide the common interface for writing events.