HITACHI CONFIDENTIAL

JP1 Job and Performance Management with Linux System

JOB MANAGEMENT PARTNER 1

2008/10/09

HITACHI ASIA LTD.
SYSTEM MANAGEMENT SOFTWARE DIVISION (JP1)
Sebastian Sin

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JOB MANAGEMENT PARTNER 1 VERSION 8
JP1 System Management Solution

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1. IT Challenges

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1 IT Challenges

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Increasing demand in quality	Internal control over IT	Reducing Operational cost	Future strategic planning
◆Stable system operation ◆Reducing down-time and maintenance	◆Software license management ◆Increasing security threat ◆Information leakage and data integrity	◆Expanding system requires more attention ◆Complex system making risk assessment even more difficult	◆Need for instant and comprehensive reports ◆Accurate and up to date information

Depend on system management!!

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2. JP1 Job Management in Linux System

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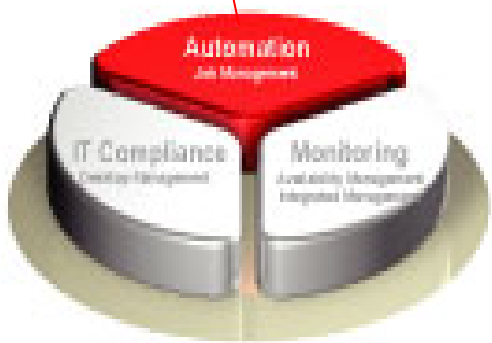
Main features of automatic job management

Job Management (JP1/AJS2)
-Cross platform
-Cross application
-Job dependency
-Good alert function
-Easy to monitor job status
-Comprehensive reporting function
-User friendly



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Imagine this manual job management difficult?

Daily back up of 100 servers from different platforms across 10 regions at 10 pm…

Problems:

- Boring routine
- Prone to human error
- Time consuming
- Effort consuming
- Resource intensive
- Cost ineffective
- Overtime…

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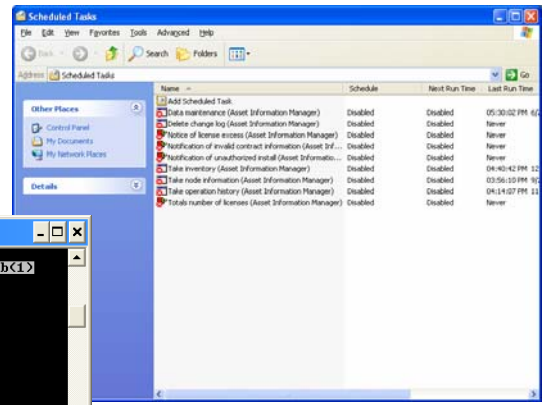
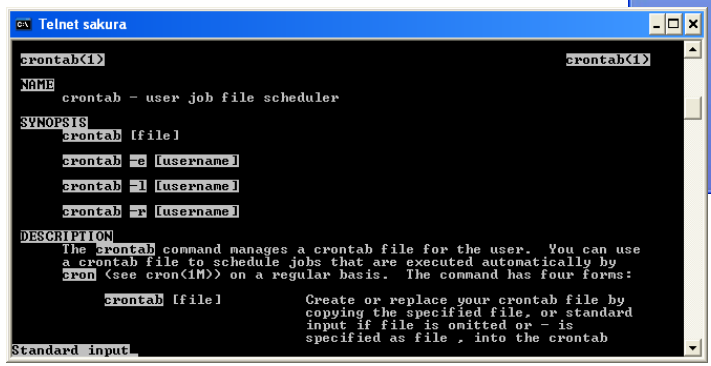
Some ways to achieve automation:

- Complex scripting
- Operating System's scheduling tools





RISKY

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Support applications across multiple servers

With JP1 components deployed in the servers, central management and job flow control can be achieved.

Apache server
(Red Hat Enterprise Linux)

MySQL Server
(Red Hat Enterprise Linux)

Filezilla FTP Server
(Windows 2003)

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Why is imperfect automation so risky?

◆Non cross platform

Windows Server Schedule:

11:00 Run Sales.exe

12:00 Run Purchase.exe

16:00 Run Sales.exe

17:00 Run Purchase.exe

18:00 Run Backup.exe

UNIX Server Schedule:

13:00 Run Inventory

14:00 Run Accounting

18:00 Run Inventory

19:00 Run Accounting

20:00 Run Backup

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Why is imperfect automation so risky?

- Non cross platform
- No job dependency – only based on timing

Windows Server Schedule:	UNIX Server Schedule:
11:00 Run Sales.exe	13:00 Run Inventory
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Why is imperfect automation so risky?

- Non cross platform
- No job dependency – only based on timing
- V
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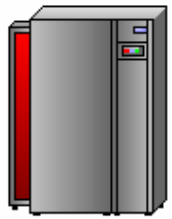

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CE

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Job dependency

Jobs can be Automatically [illegible]red by Events.

Some Examples:

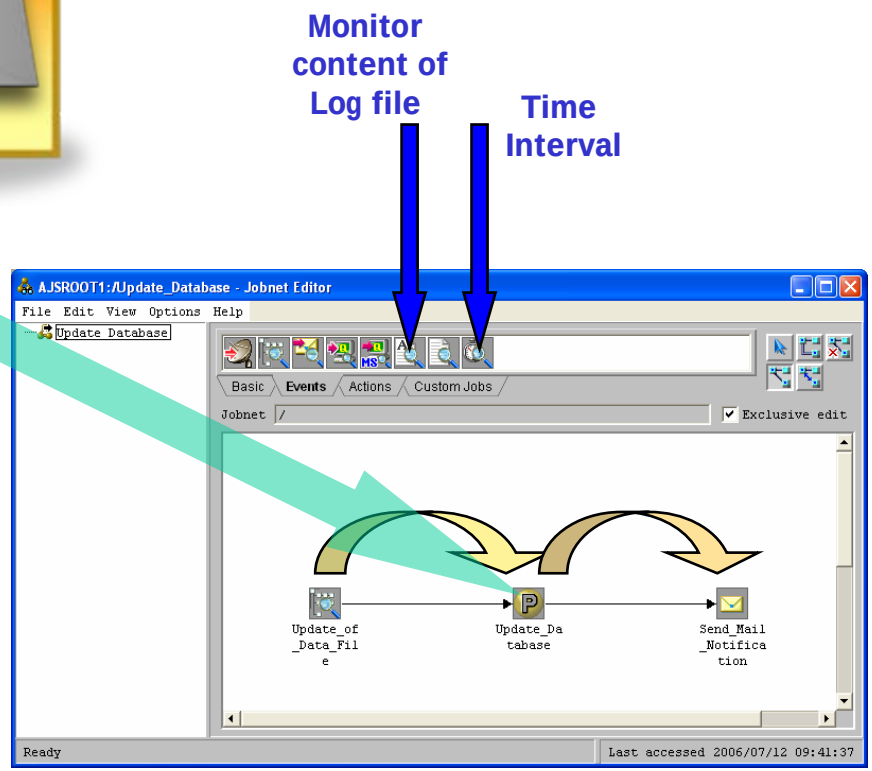
Receiving an e-mail

The creation/update of a file

The completion of a previous job

Monitor log file

Time interval



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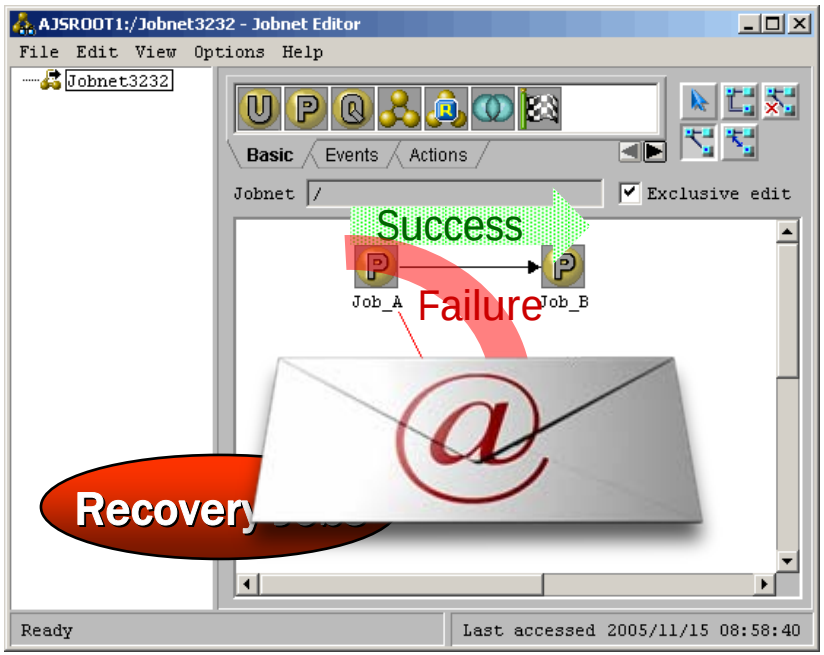
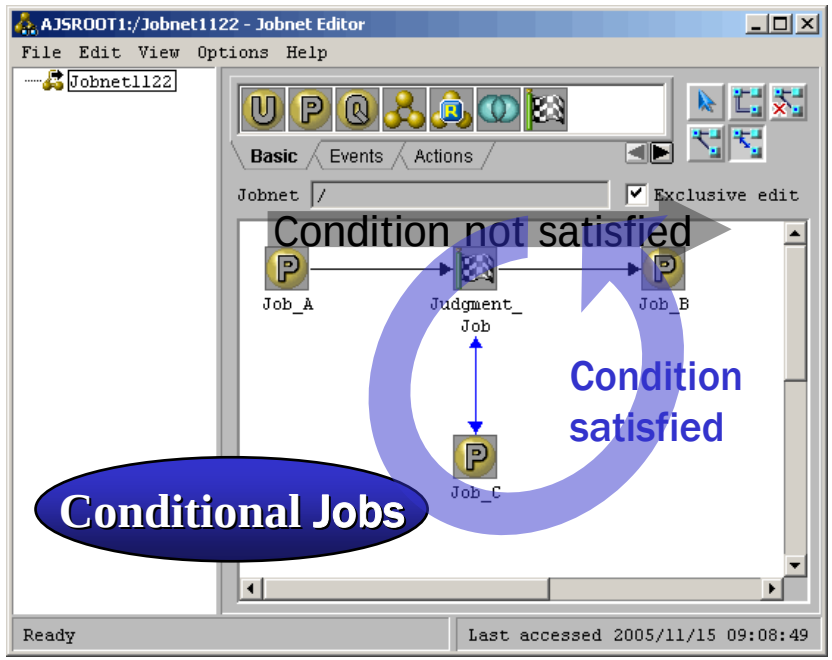
Good alert function

Jobs can Automatically React to Errors or Conditions.





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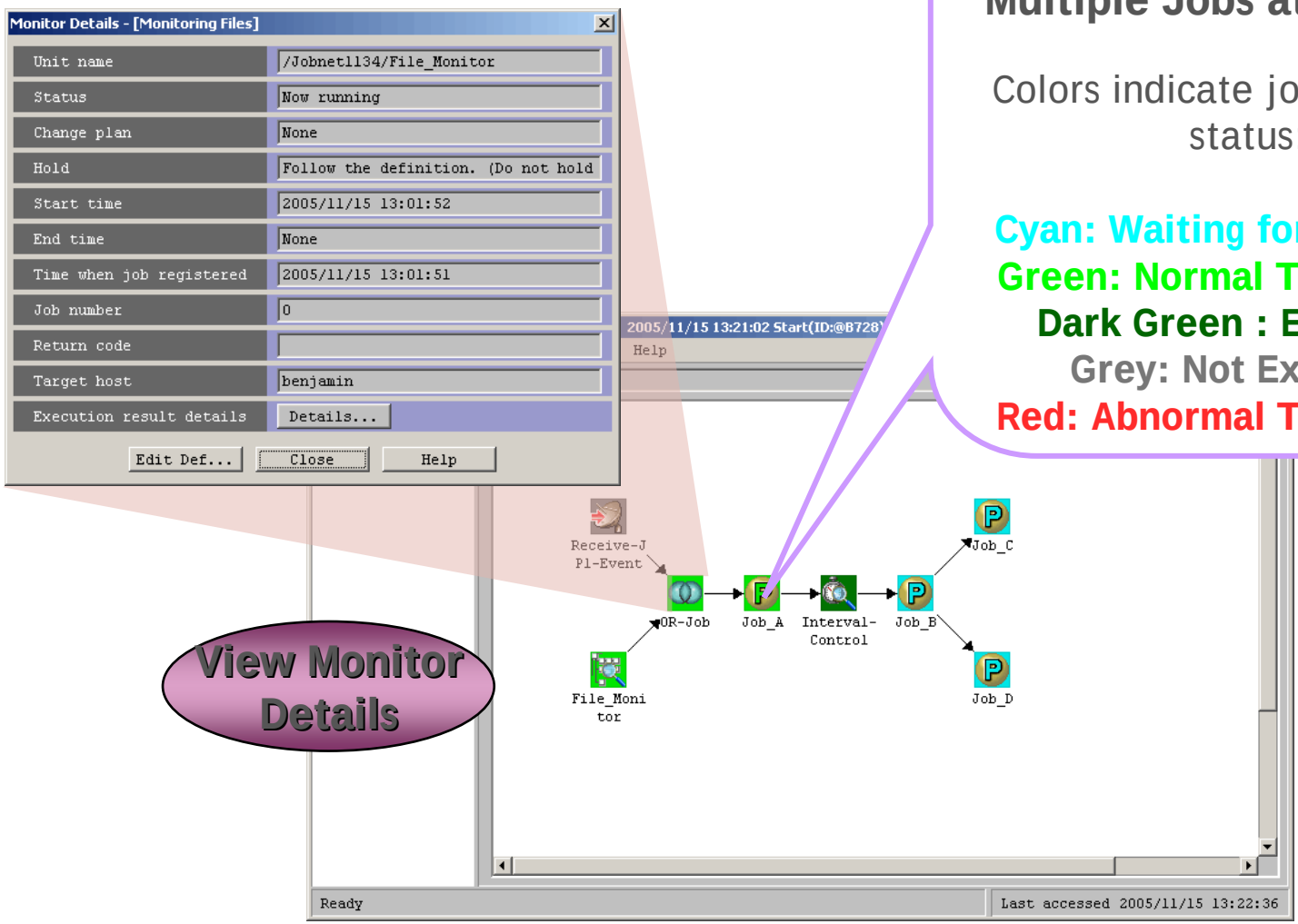
Easy to monitor job status



View Monitor Details

View the Job Statuses of Multiple Jobs at a Glance!

Colors indicate job execution status:

Cyan: Waiting for Execution
Green: Normal Termination
Dark Green : Executing
Grey: Not Executed
Red: Abnormal Termination

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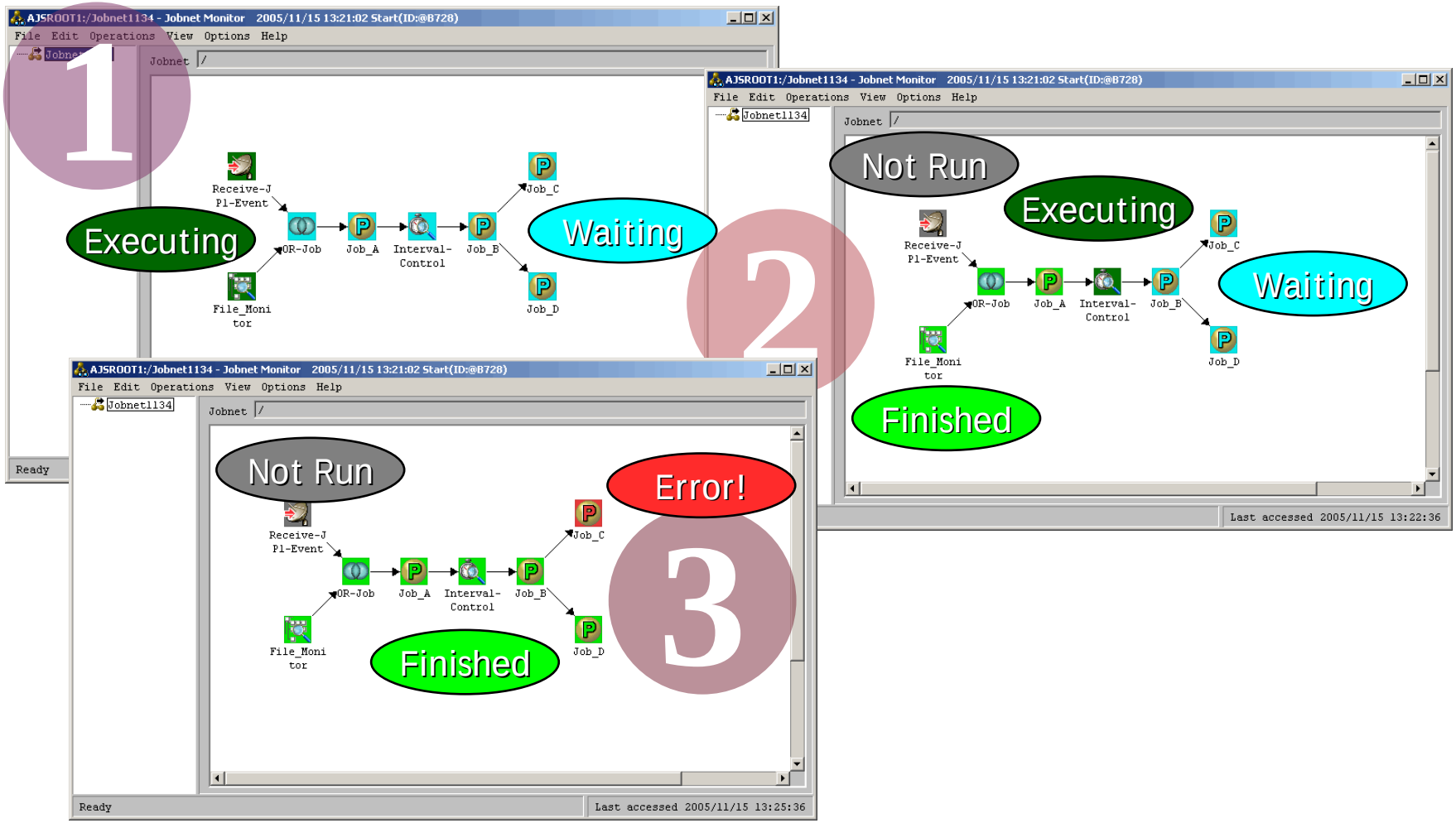
Easy to monitor job status



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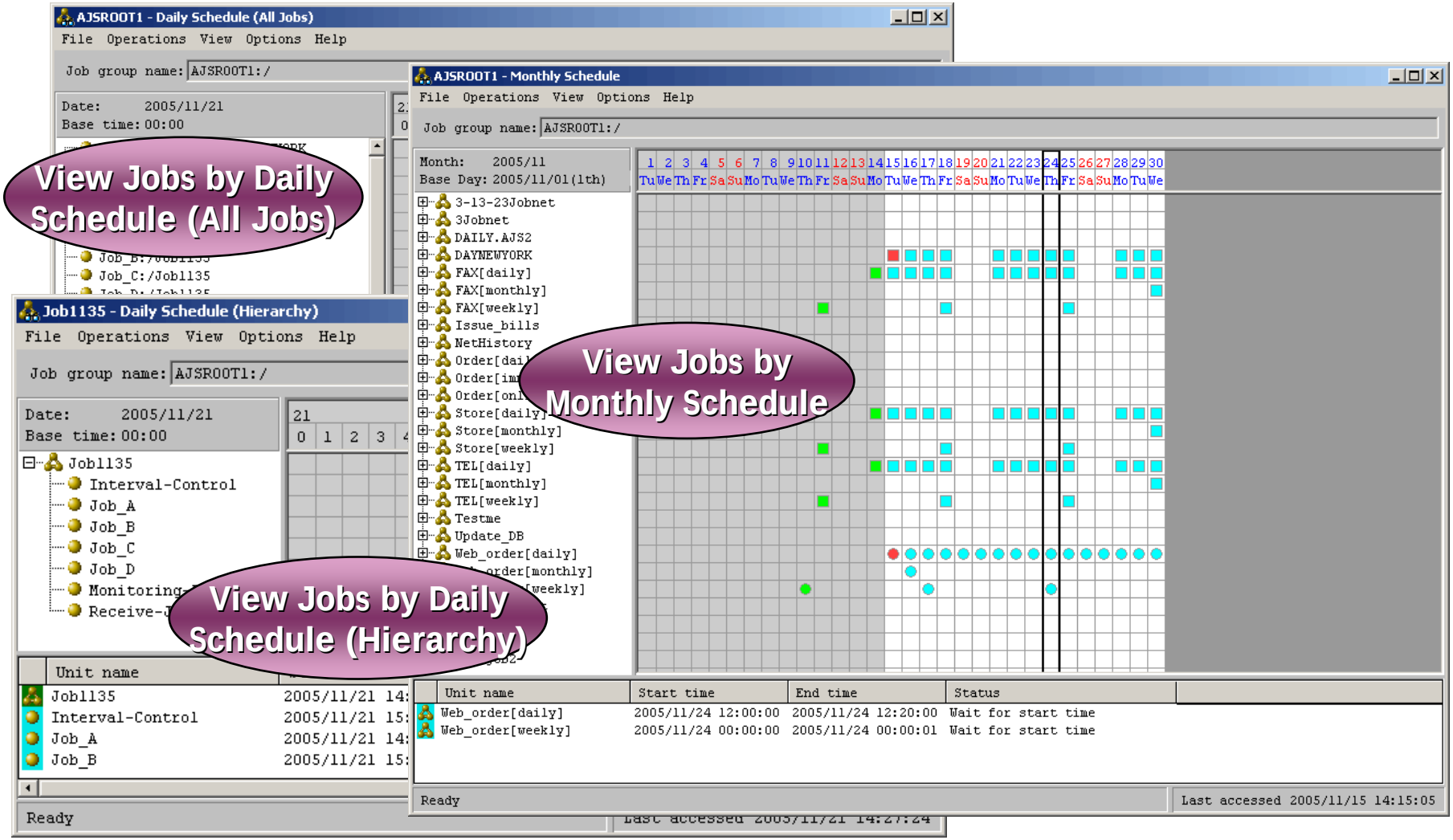
Comprehensive reporting function



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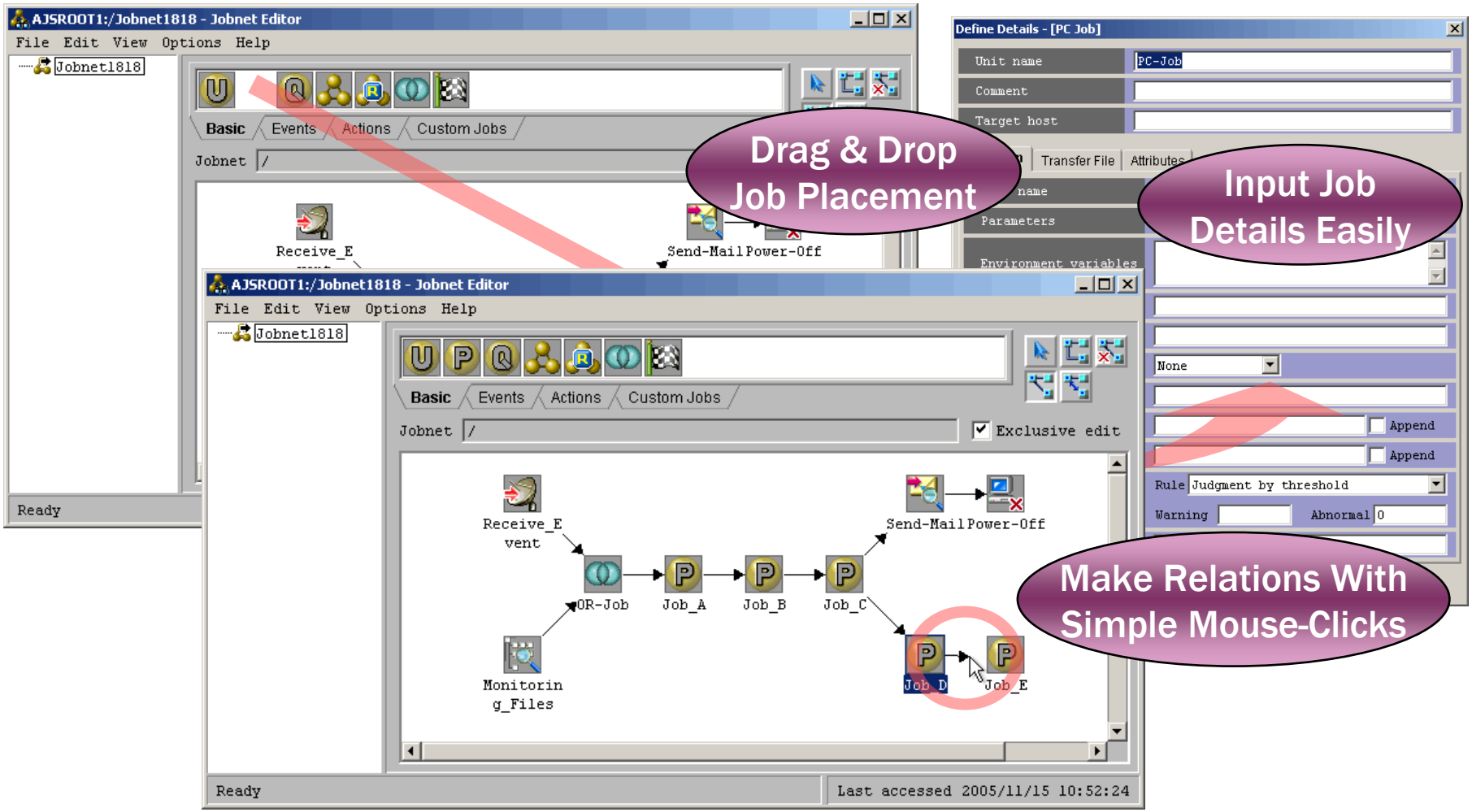
User friendly

A well-designed GUI makes it easy to define jobs



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JP1/Job Management's value preposition

- **Reduces operational risks**
  - Reduce human error through automation of tasks / jobs
  - Automates error recovery for business processes
- **Operation Integration into single management**
  - Automates job scheduling across multiple platforms
  - Automates job scheduling across multiple business applications
- **Simple and easy to use**
  - Provides a flexible, adaptive, service-oriented architecture for job scheduling
  - Improves efficiency and effectiveness
- **Reduces and control cost**
  - Increases availability of resources through optimization of job scheduling
  - Improve the productivity of designated staff

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3. JP1 Performance Management in Linux System

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Main functions of performance/availability management

Performance/availability Management (JP1/PFM)
-Monitoring of operation status
-Early warning system
-Future prediction
-Capacity planning

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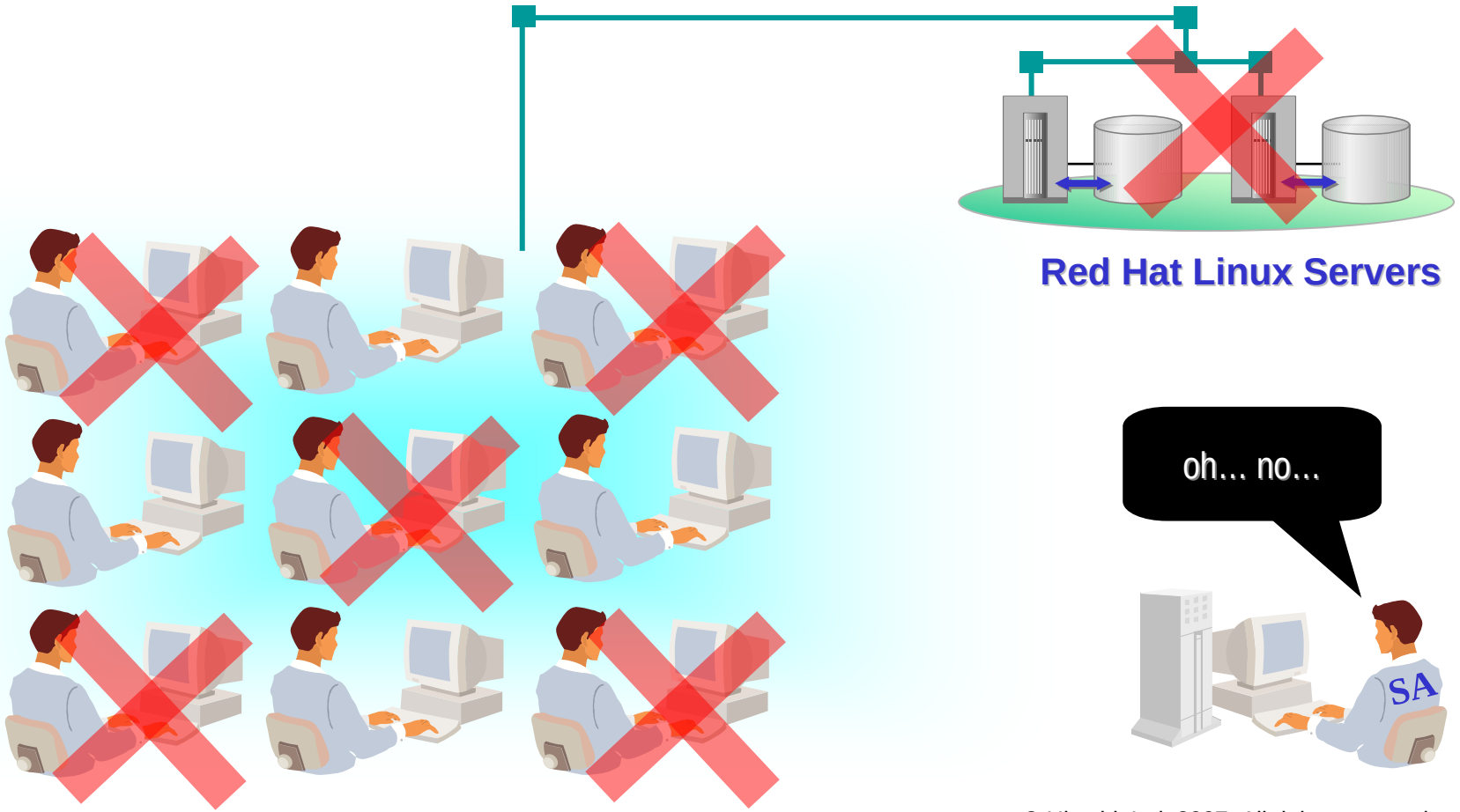
Why is maintaining service level so difficult?

No early warning system



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Why is capacity planning so difficult?

How do you know what cause your system crash every 4:30pm?

How do you predict your server utilization 1 year down the road?

How do you know that it's time to upgrade?

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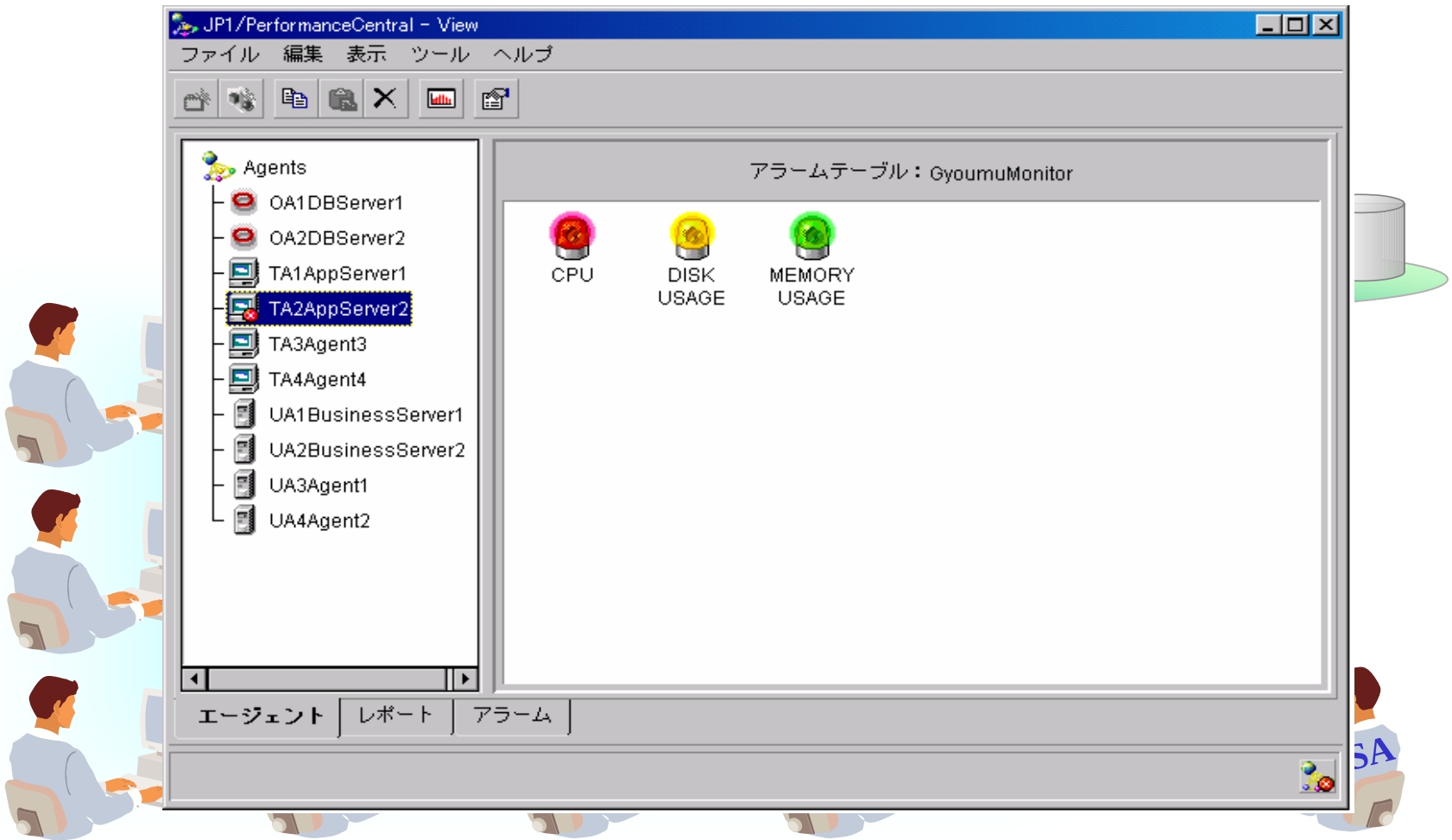
Gives you early warning system



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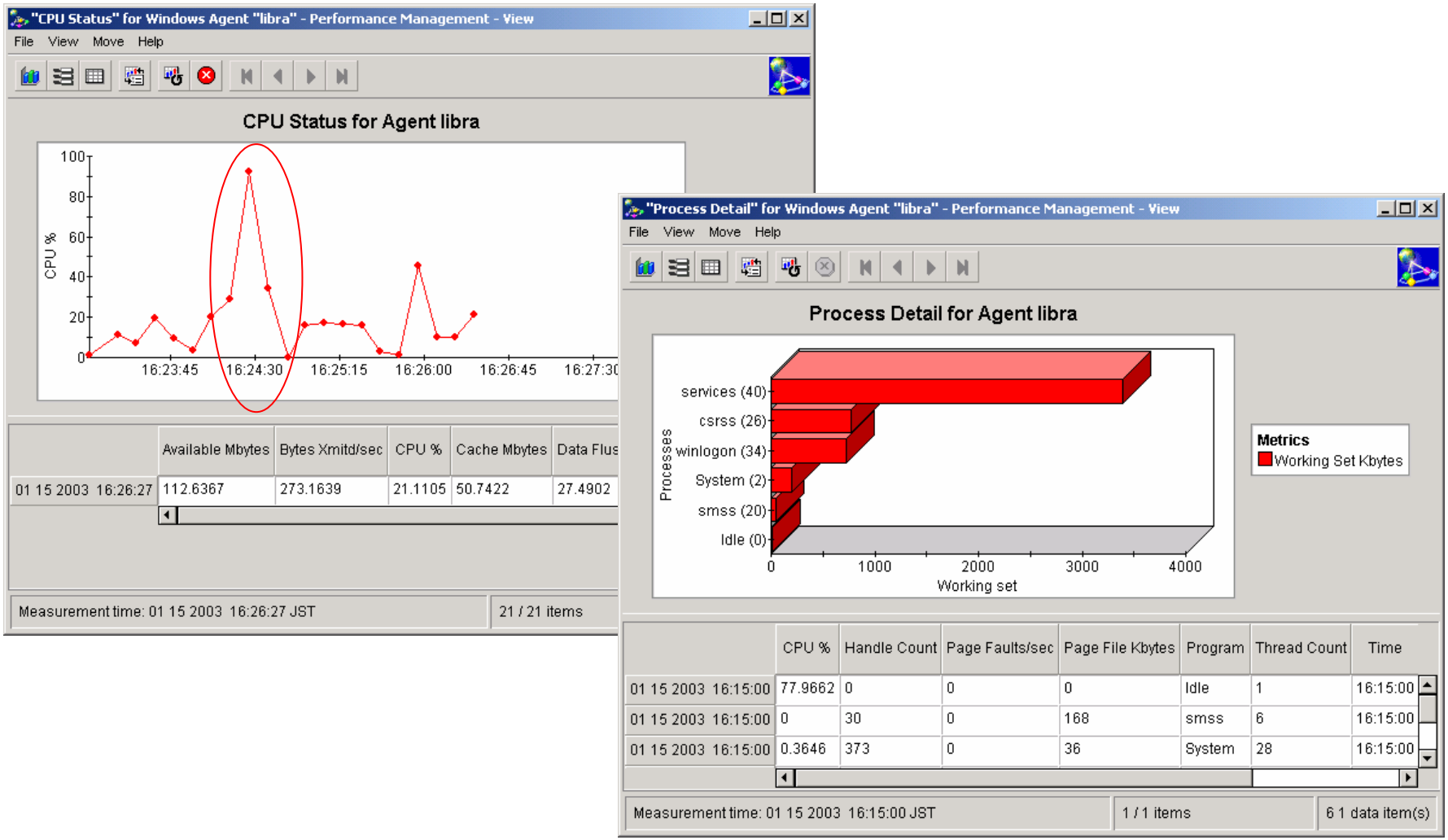
Gives you comprehensive performance reporting



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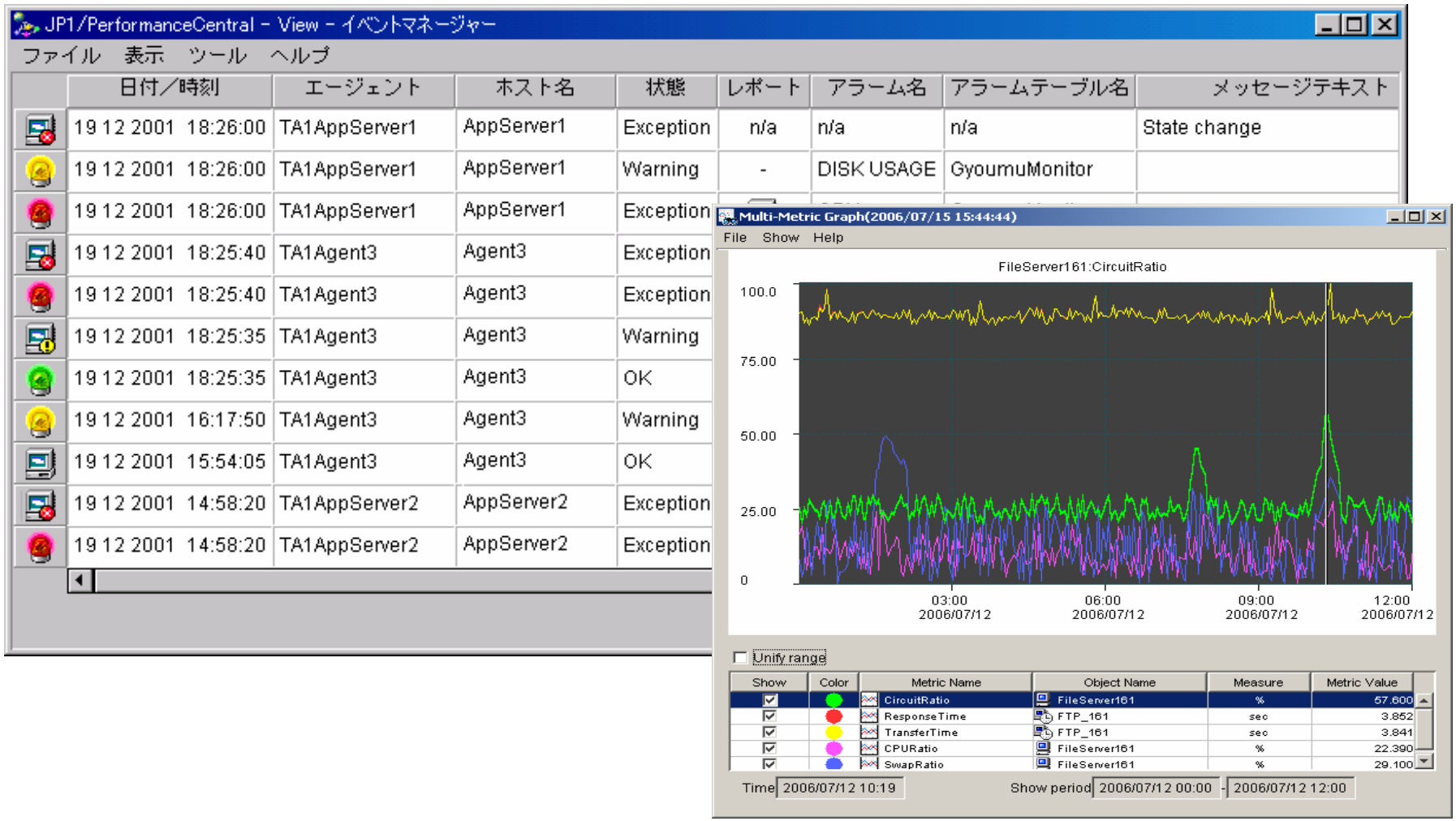
Performance history for capacity planning



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JP1/Performance Management's value preposition

- **Simple and Convenient**
  - Centrally manages server and application availability with intuitive graphical format for multiple platforms
- **Increase Server, application and Network up-time**
  - Able to manage server, applications and networks more intelligently, increasing up-time and lower costs
- **Solutions Set available for used immediately and highly customizable**
- **Early warning system**
  - Administrator gets alert before problem gets out of control
- **Proactive management through reporting**
  - Generated reports enable historical data analysis and assist in preventive measures

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Thank You Very Much For Your Attention

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