



JP1 Job and Performance Management with Linux System

JOB MANAGEMENT PARTNER 1

2008/10/09

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JOB MANAGEMENT PARTNER 1 VERSION 8

JP1 System Management Solution

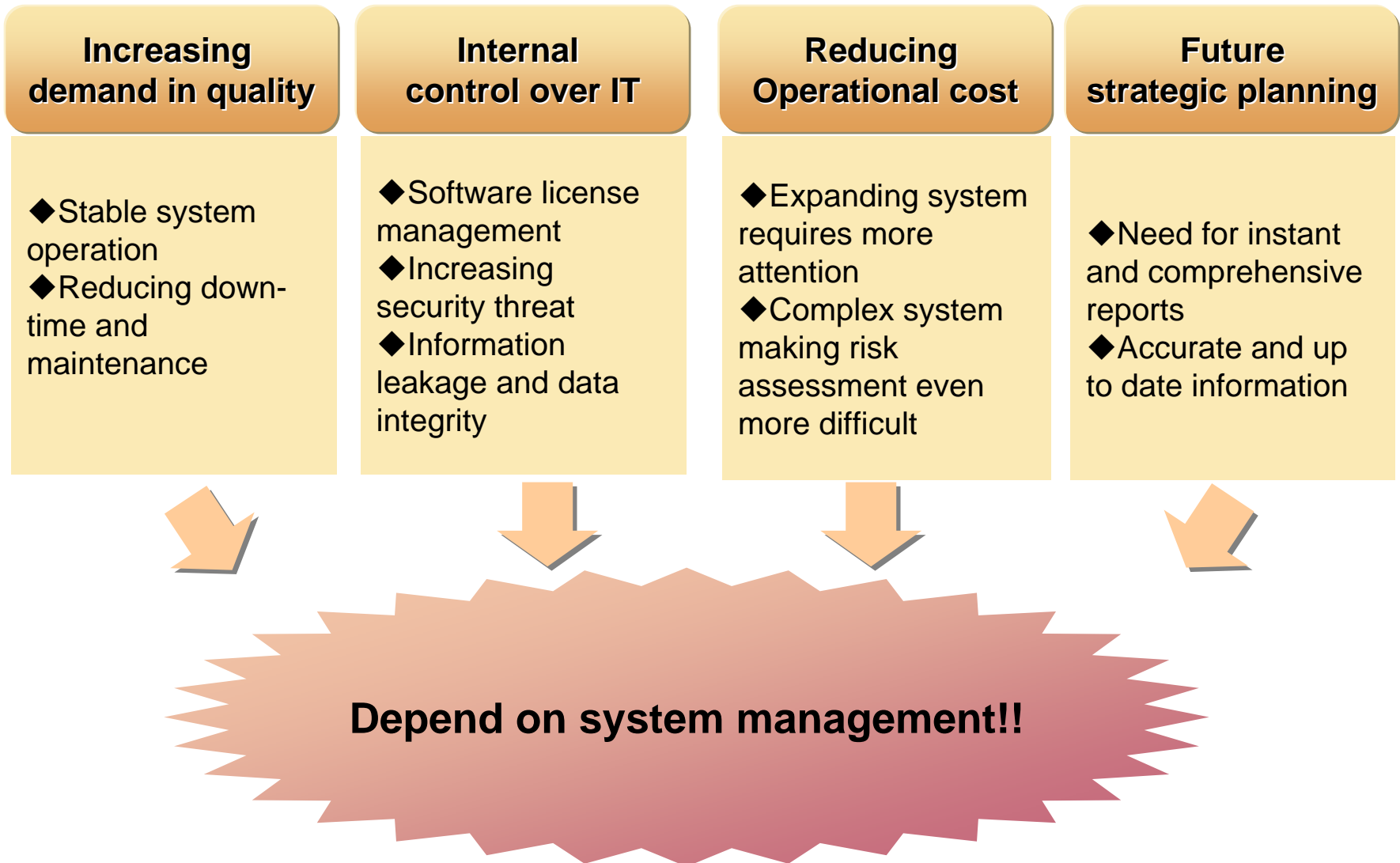
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JOB MANAGEMENT PARTNER 1 VERSION 8

JP1 System Management Solution

1. IT Challenges



JOB MANAGEMENT PARTNER 1 VERSION 8
JP1 System Management Solution

2. JP1 Job Management in Linux System

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



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...

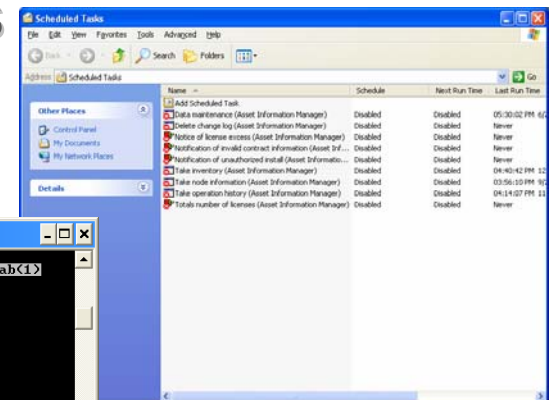
Some ways to achieve automation:

◆Complex scripting

◆Operating System's scheduling tools

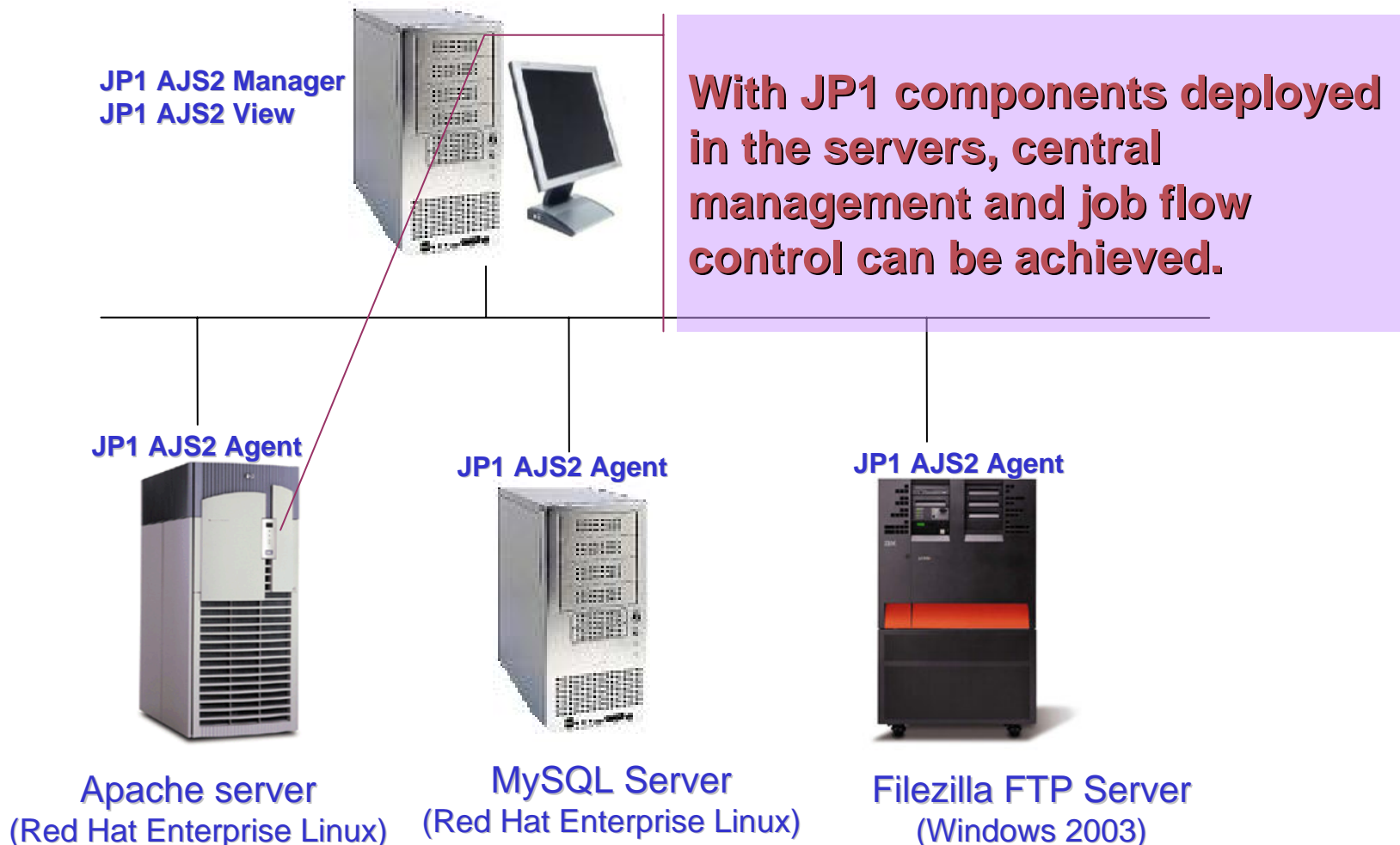
```
Telnet sakura

crontab(1)                                crontab(1)
NAME
    crontab - user job file scheduler
SYNOPSIS
    crontab [-u username] [-e|-l|-r] [file]
DESCRIPTION
    The crontab command manages a crontab file for the user. You can use
    a crontab file to schedule jobs that are executed automatically by
    cron (see cron(1M)) on a regular basis. The command has four forms:
        crontab [file]
        Create or replace your crontab file by
        copying the specified file, or standard
        input if file is omitted or - is
        specified as file, into the crontab
Standard input_
```



RISKY

Support applications across multiple servers



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

Why is imperfect automation so risky?

◆ Non cross platform

◆ No job dependency – only based on timing



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Windows Server Schedule:

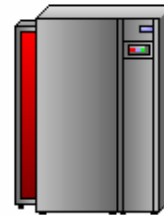
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CE

Job dependency

Jobs can be Automatically Triggered by Events.

Some Examples:

Receiving an e-mail

The creation/update of a file

The completion of a previous job

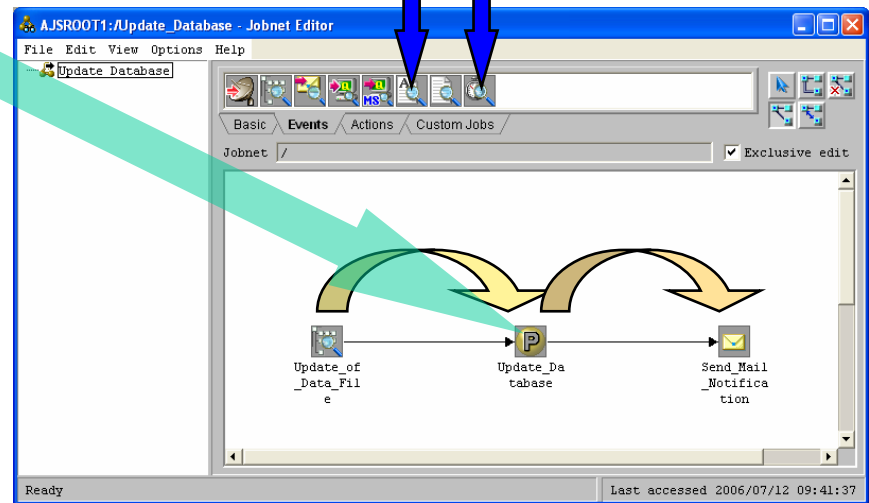
Monitor log file

Time interval



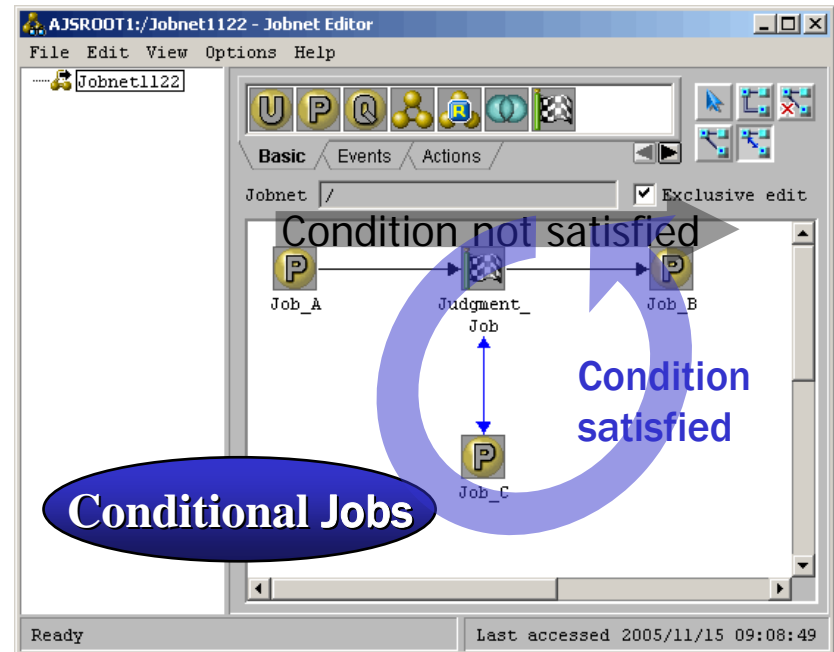
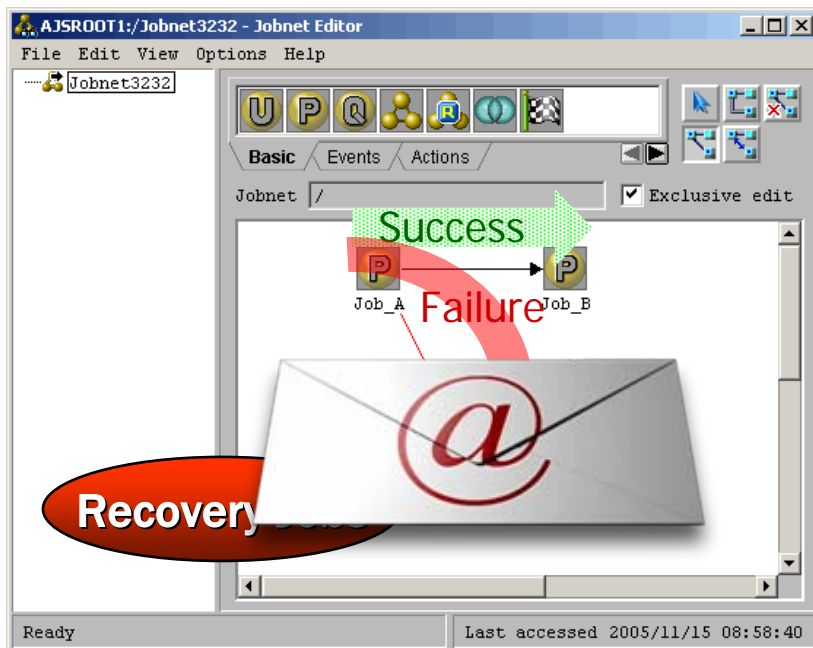
Monitor
content of
Log file

Time
Interval



Good alert function

Jobs can Automatically React to Errors or Conditions.



Easy to monitor job status

The screenshot displays the Hitachi Job Management interface. A 'Monitor Details - [Monitoring Files]' window is open, showing the following information:

Unit name	/Jobnet1134/File_Monitor
Status	Now running
Change plan	None
Hold	Follow the definition. (Do not hold)
Start time	2005/11/15 13:01:52
End time	None
Time when job registered	2005/11/15 13:01:51
Job number	0
Return code	
Target host	benjamin
Execution result details	Details...

Below the details window, a job flow diagram is visible. It starts with 'File_Monitor' (green icon) leading to 'OR-Job' (green icon), which then branches into 'Job_A' (green icon), 'Interval-Control' (green icon), 'Job_B' (cyan icon), and 'Job_C' (cyan icon). 'Job_B' also leads to 'Job_D' (cyan icon). A callout bubble points to 'Job_A' with the text '2005/11/15 13:21:02 Start(ID:@B728)'.

A purple oval callout points to the 'Monitor Details' window with the text 'View Monitor Details'.

A purple speech bubble contains the following text:

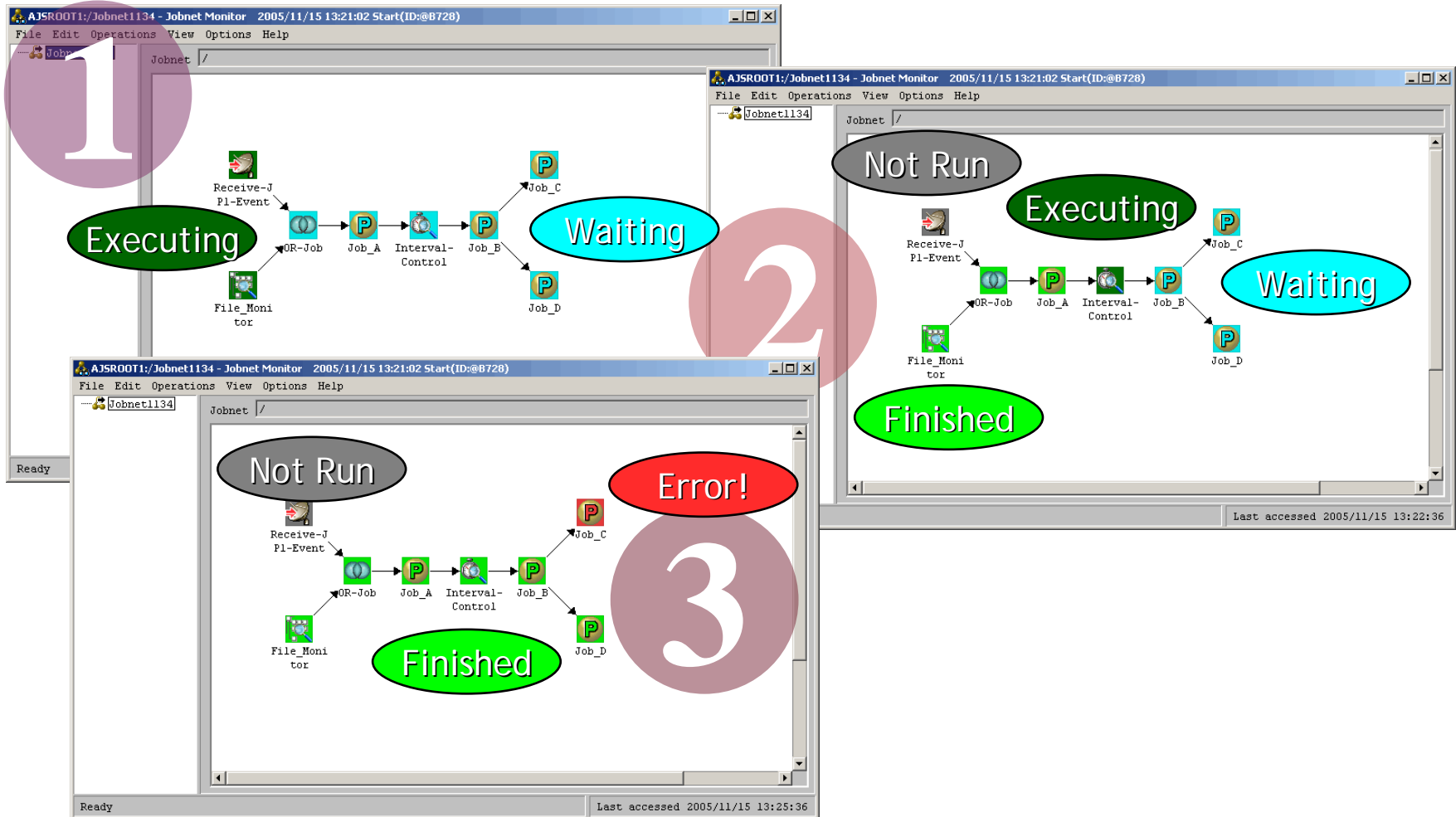
View the Job Statuses of Multiple Jobs at a Glance!

Colors indicate job execution status:

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

The bottom status bar shows 'Ready' and 'Last accessed 2005/11/15 13:22:36'.

Easy to monitor job status



Comprehensive reporting function

AJSR00T1 - Daily Schedule (All Jobs)

File Operations View Options Help

Job group name: AJSR00T1:/

Date: 2005/11/21
Base time: 00:00

View Jobs by Daily Schedule (All Jobs)

Job1135 - Daily Schedule (Hierarchy)

File Operations View Options Help

Job group name: AJSR00T1:/

Date: 2005/11/21
Base time: 00:00

21
0 1 2 3 4

Job1135

- Interval-Control
- Job_A
- Job_B
- Job_C
- Job_D
- Monitoring
- Receive-

View Jobs by Daily Schedule (Hierarchy)

AJSR00T1 - Monthly Schedule

File Operations View Options Help

Job group name: AJSR00T1:/

Month: 2005/11
Base Day: 2005/11/01(1th)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We

3-13-23Jobnet

3Jobnet

DAILY.AJS2

DAYNEWYORK

FAX[daily]

FAX[monthly]

FAX[weekly]

Issue_bills

NetHistory

Order[daily]

Order[monthly]

Order[weekly]

Store[daily]

Store[monthly]

Store[weekly]

TEL[daily]

TEL[monthly]

TEL[weekly]

Testme

Update_DB

Web_order[daily]

Web_order[monthly]

Web_order[weekly]

View Jobs by Monthly Schedule

Unit name	Start time	End time	Status
Job1135	2005/11/21 14:00:00	2005/11/21 15:00:00	
Interval-Control	2005/11/21 15:00:00	2005/11/21 16:00:00	
Job_A	2005/11/21 14:00:00	2005/11/21 15:00:00	
Job_B	2005/11/21 15:00:00	2005/11/21 16:00:00	
Web_order[daily]	2005/11/24 12:00:00	2005/11/24 12:20:00	Wait for start time
Web_order[weekly]	2005/11/24 00:00:00	2005/11/24 00:00:01	Wait for start time

Ready

Last accessed 2005/11/21 14:27:24

Last accessed 2005/11/15 14:15:05

User friendly

A well-designed GUI makes it easy to define jobs

The screenshot displays the Jobnet Editor interface with two overlapping windows. The main window, titled 'AJSR00T1:/Jobnet1818 - Jobnet Editor', shows a workflow diagram. A red arrow points from a 'U' icon in the toolbar to the 'Receive_E' event in the diagram, illustrating the 'Drag & Drop Job Placement' feature. The diagram includes a sequence of jobs: 'OR-Job', 'Job_A', 'Job_B', 'Job_C', 'Job_D', and 'Job_E', connected by arrows. A 'Monitorin g_Files' icon is also present. The status bar at the bottom indicates 'Ready' and 'Last accessed 2005/11/15 10:52:24'. A second window, 'Define Details - [PC Job]', is open on the right, showing fields for 'Unit name' (PC-Job), 'Comment', 'Target host', and 'Parameters'. A red arrow points from the 'Append' checkbox in this window to the 'Input Job Details Easily' callout. A third callout, 'Make Relations With Simple Mouse-Clicks', points to the connection between 'Job_D' and 'Job_E' in the diagram.

Drag & Drop Job Placement

Input Job Details Easily

Make Relations With Simple Mouse-Clicks

JP1/Job Management's value proposition

- **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

JOB MANAGEMENT PARTNER 1 VERSION 8
JP1 System Management Solution

3. JP1 Performance Management in Linux System

Main functions of performance/availability management

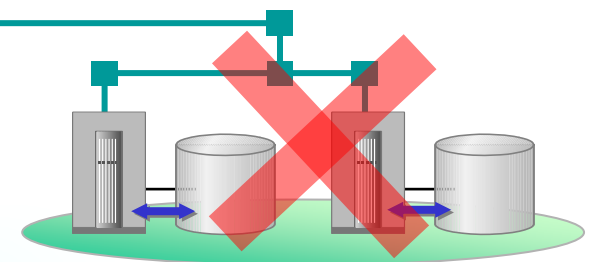
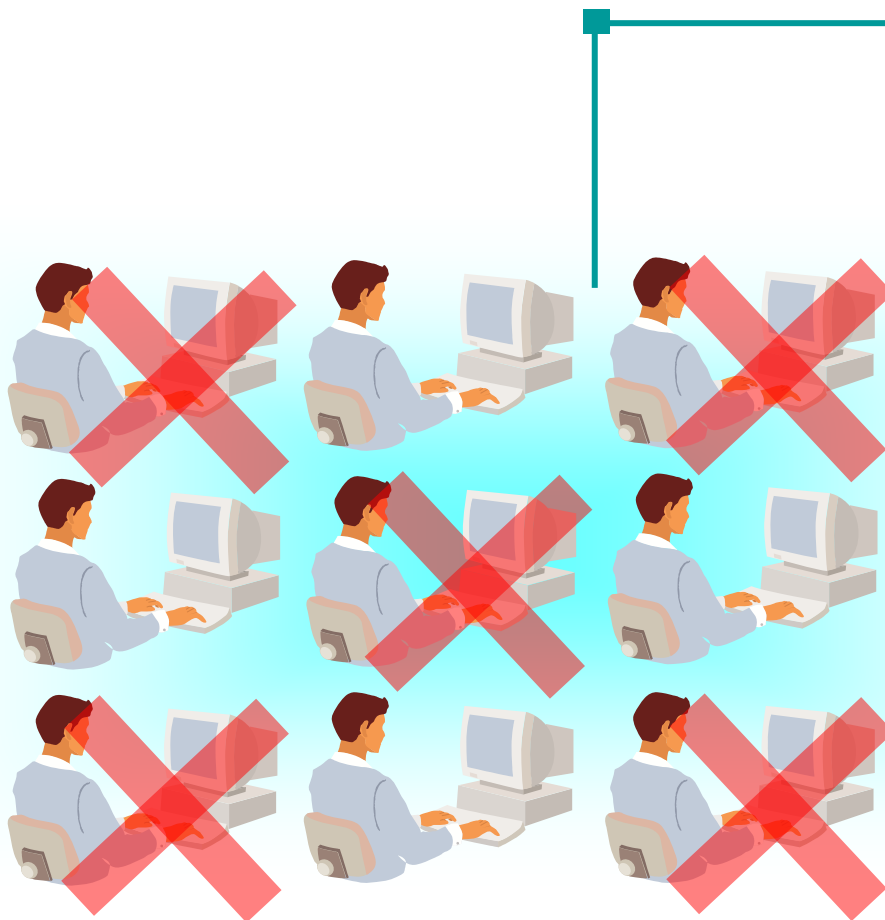
Performance/availability Management (JP1/PFM)

- Monitoring of operation status
- Early warning system
- Future prediction
- Capacity planning



Why is maintaining service level so difficult?

No early warning system



Red Hat Linux Servers



Why is capacity planning so difficult?

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

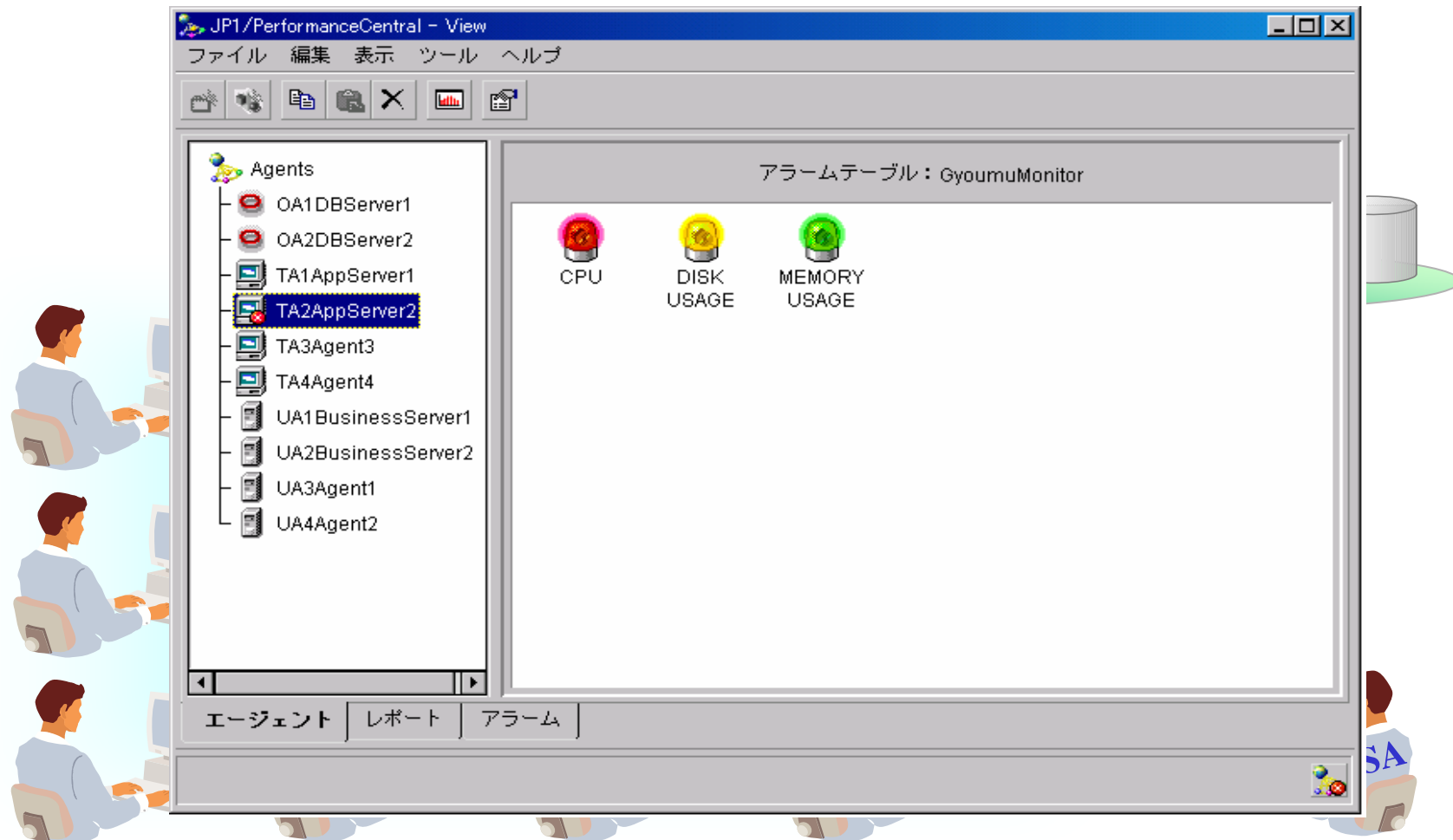
How do you predict your server utilization 1 year down the road?

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

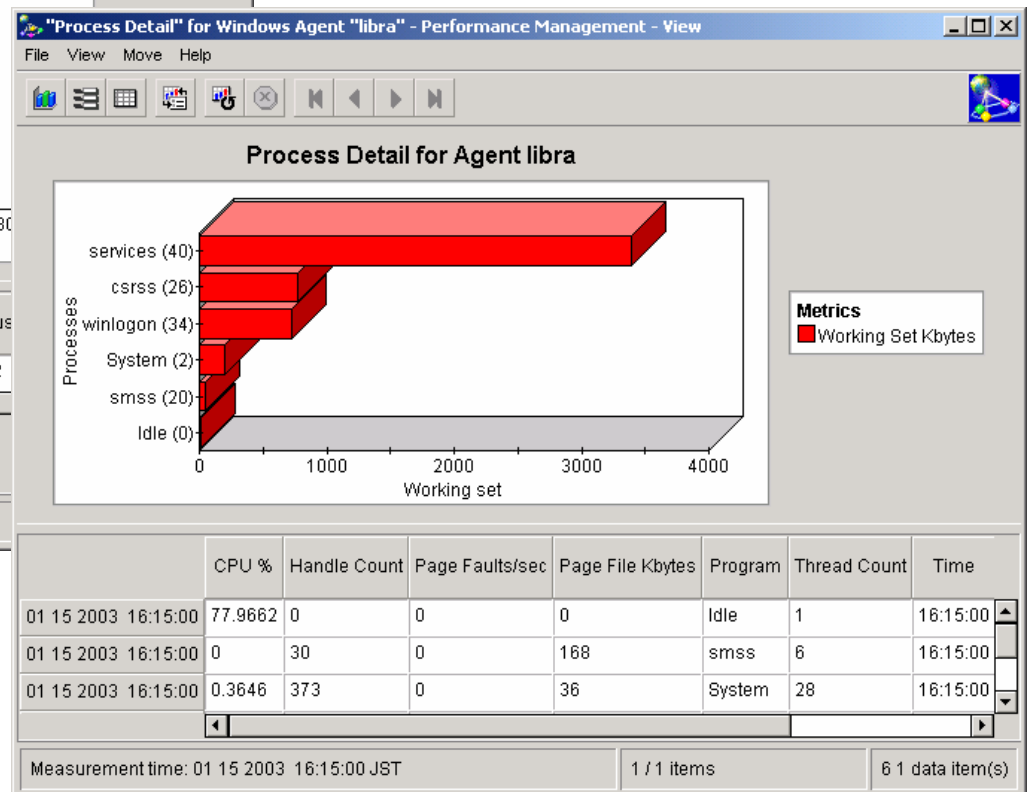
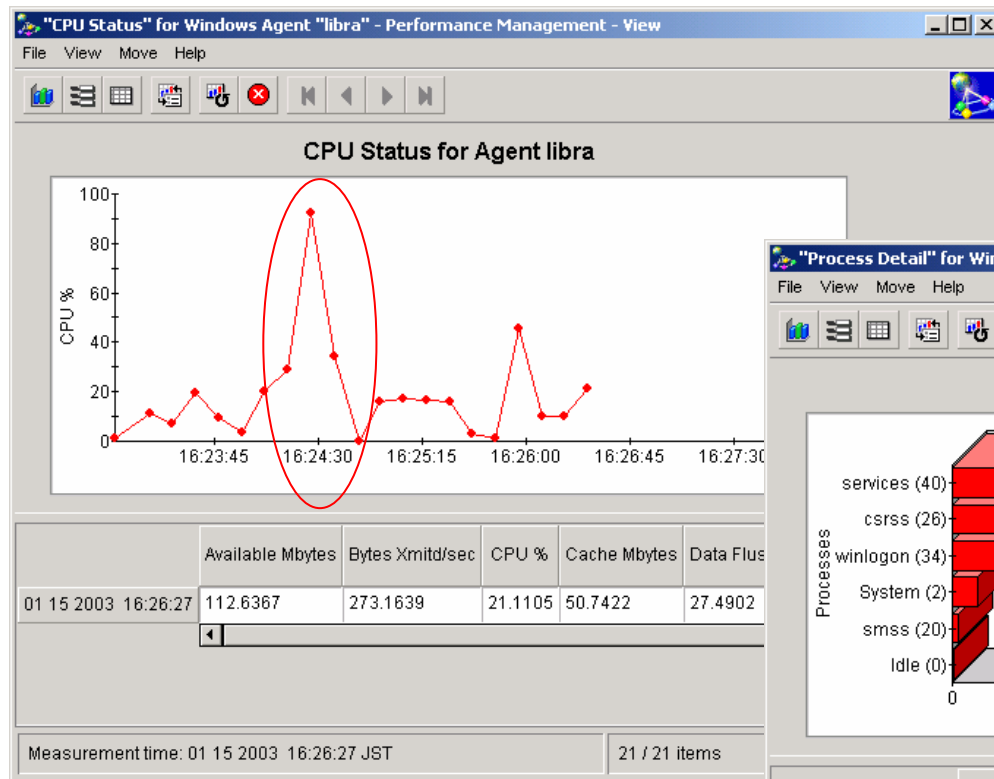


Performance Management Tool

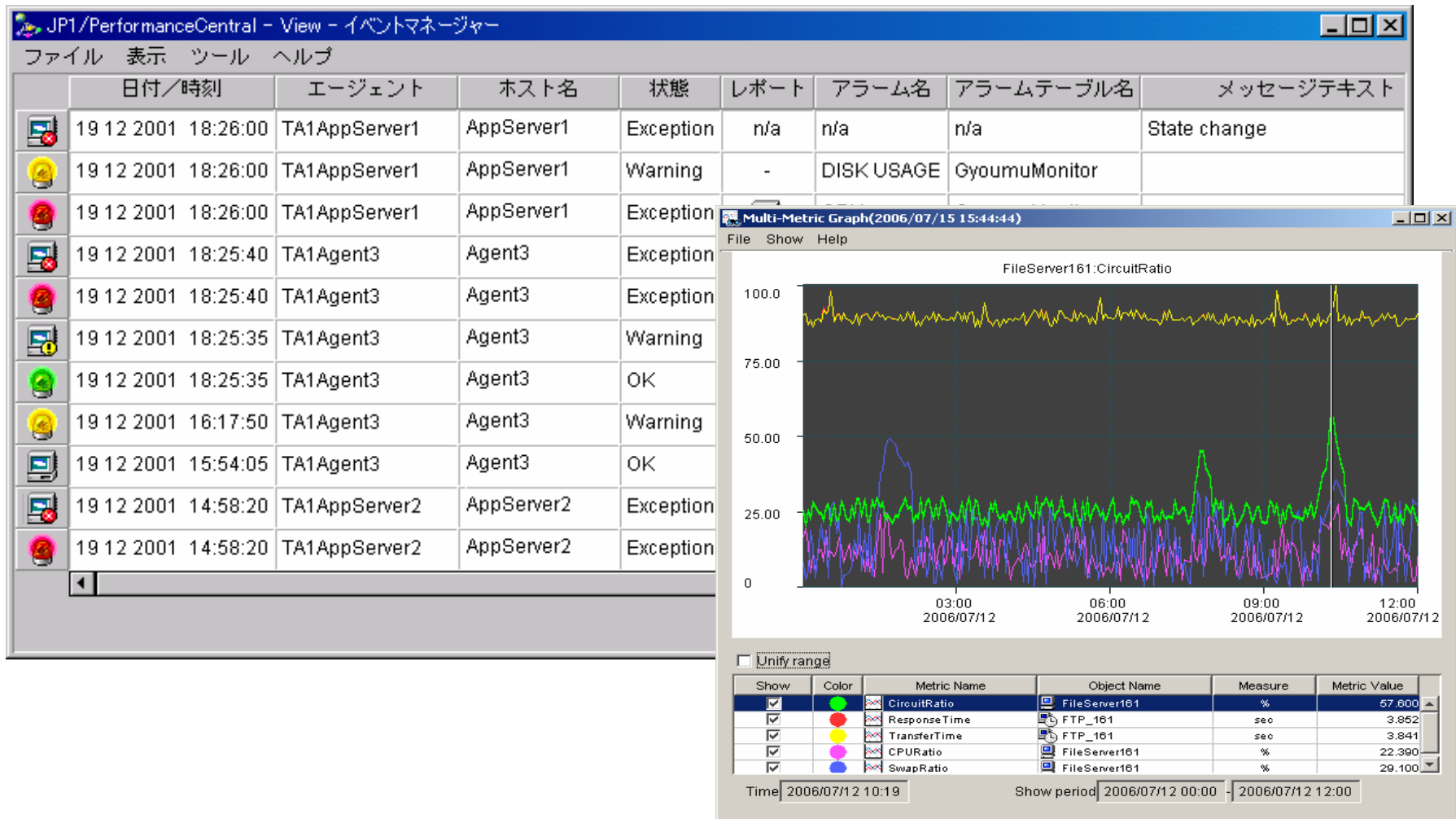
Gives you early warning system



Gives you comprehensive performance reporting



Performance history for capacity planning



JP1/Performance Management's value proposition

- **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

Thank You Very Much For Your Attention

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