



# what is hp process manager?

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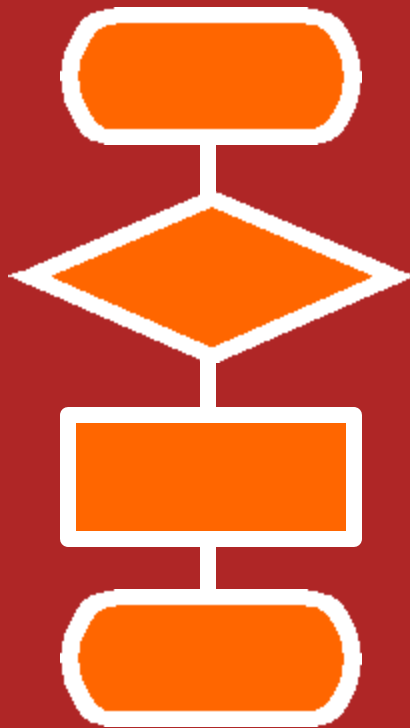
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orchestrate

the need for process  
management

- co-ordinate, track and measure e-services
- manual processes are complicated and take too long
- integrate your systems and processes with everybody else's
- see problems before they occur
- introduce new products and services quickly!
- track and measure customers and business performance

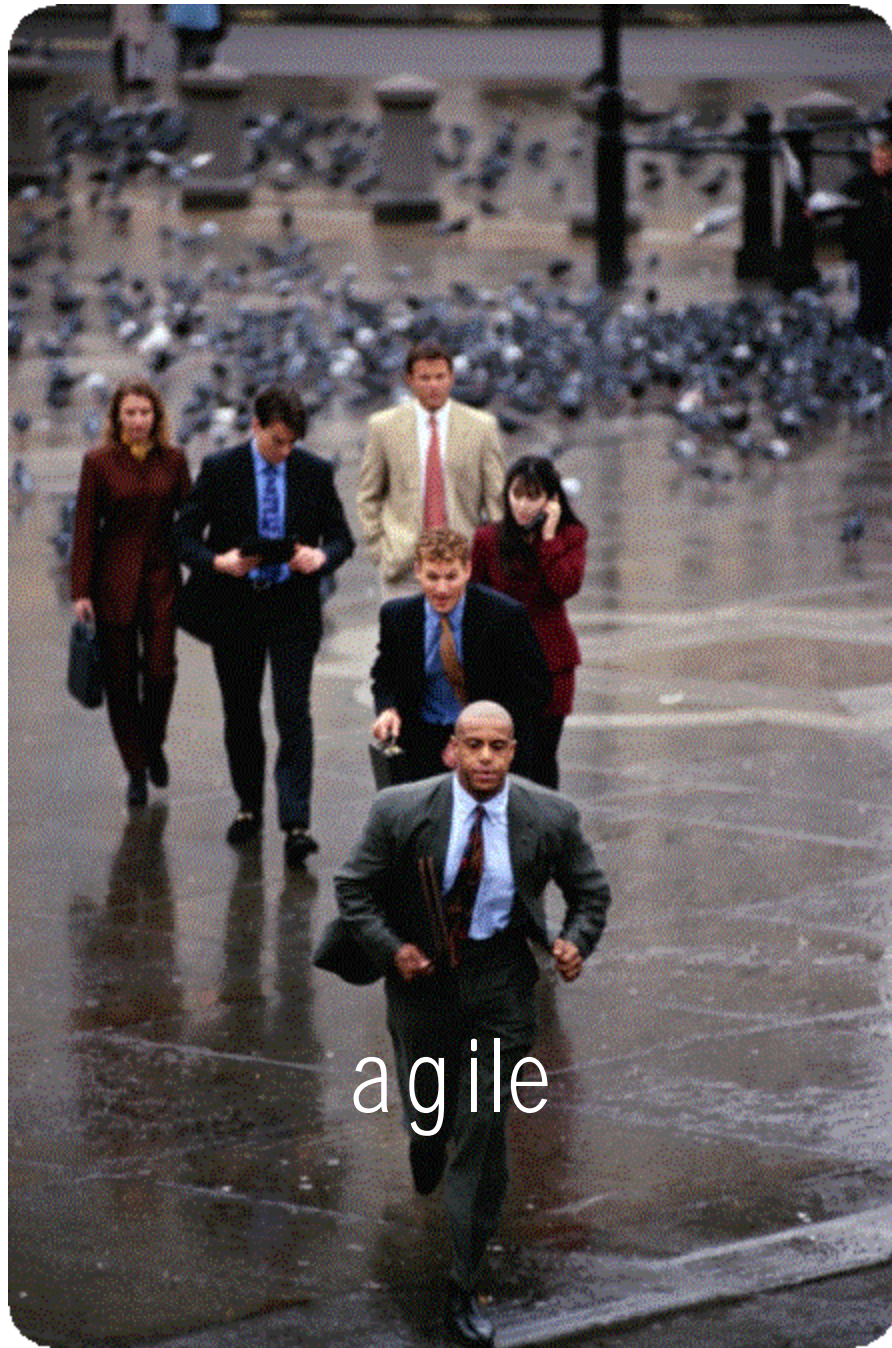


process

## what is a process?

- A series of tasks that achieve a common purpose
- Each task is performed by a person or a software application
- Work is automatically sent to recipient
  - People: web, email, software application
  - Applications: through an integration system
- Processes can be...
  - Across Departments
  - Across the Enterprise
  - Across companies - include customers and suppliers





## hp process manager

Maintain a competitive advantage as the market changes

An environment for the rapid creation of process and service centric solutions.

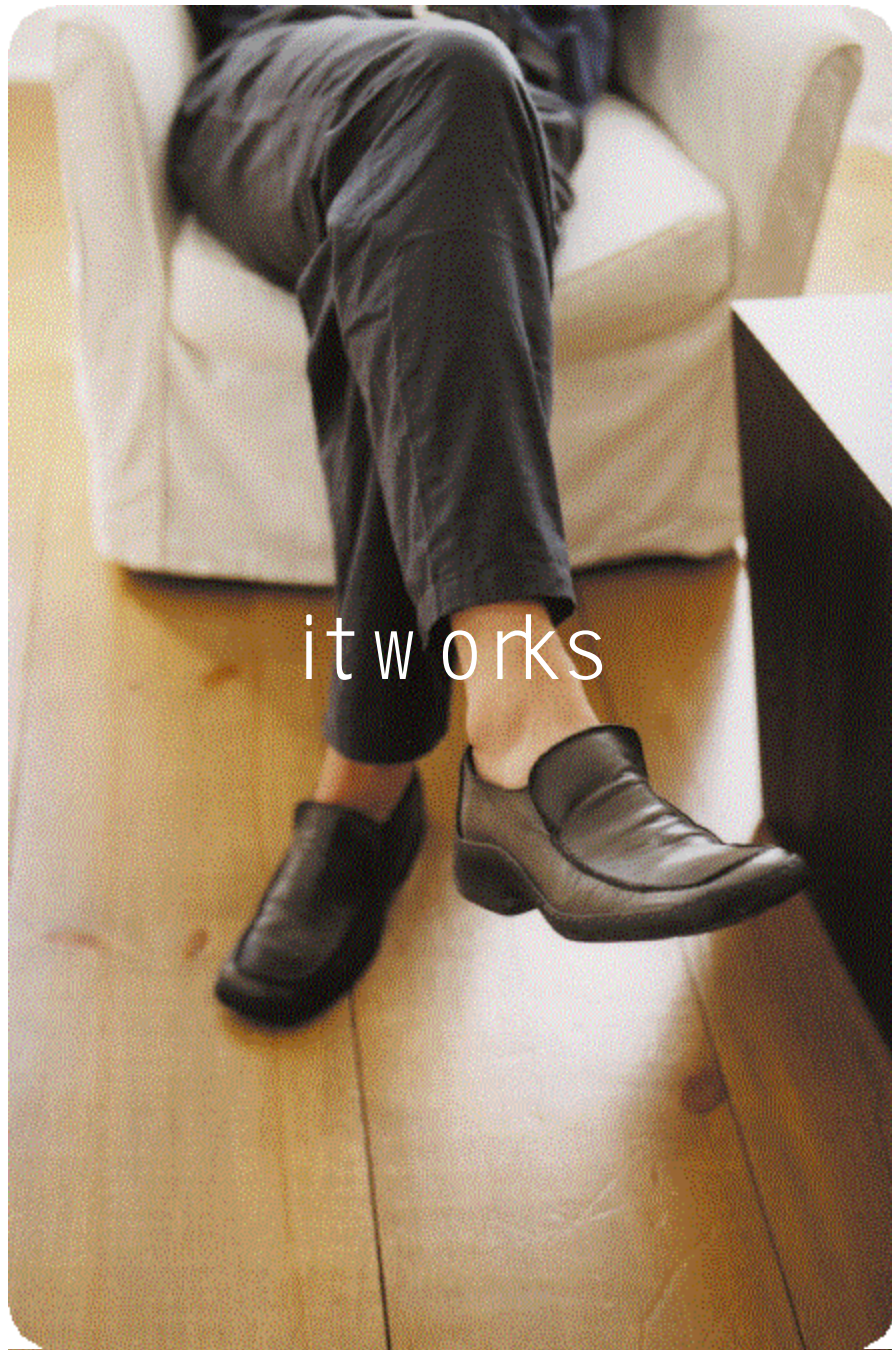
It allows the flexible, controlled integration and co-operation between employees and business applications in order to meet and deliver Enterprise objectives.





sm art

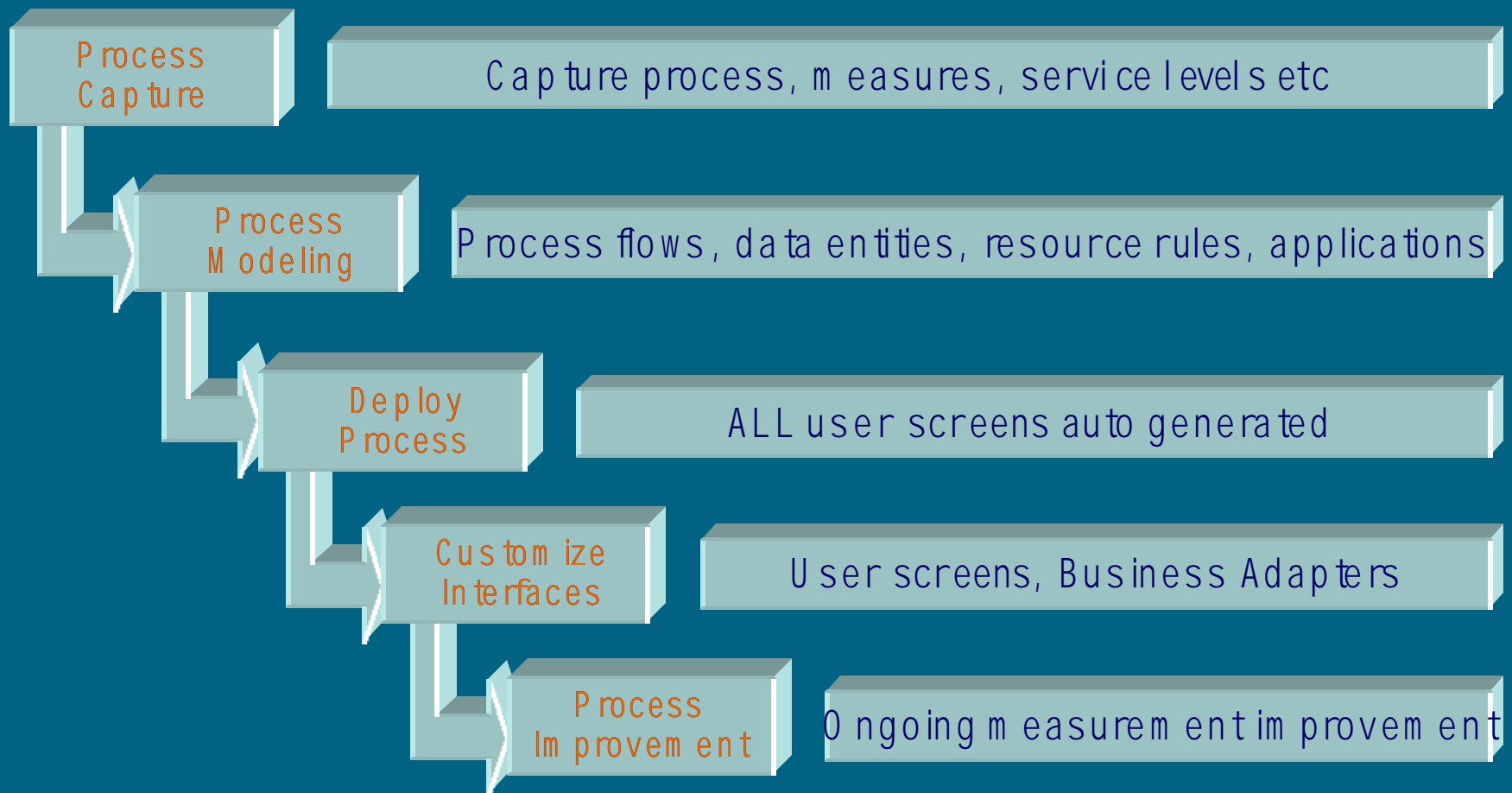
- rapid process development
- separation of
  - what (processes)
  - who (resources)
  - how (services)
- grows with you
- high performance
- reliable
- enterprise application integration
- tracking and monitoring



## benefits experienced by customers

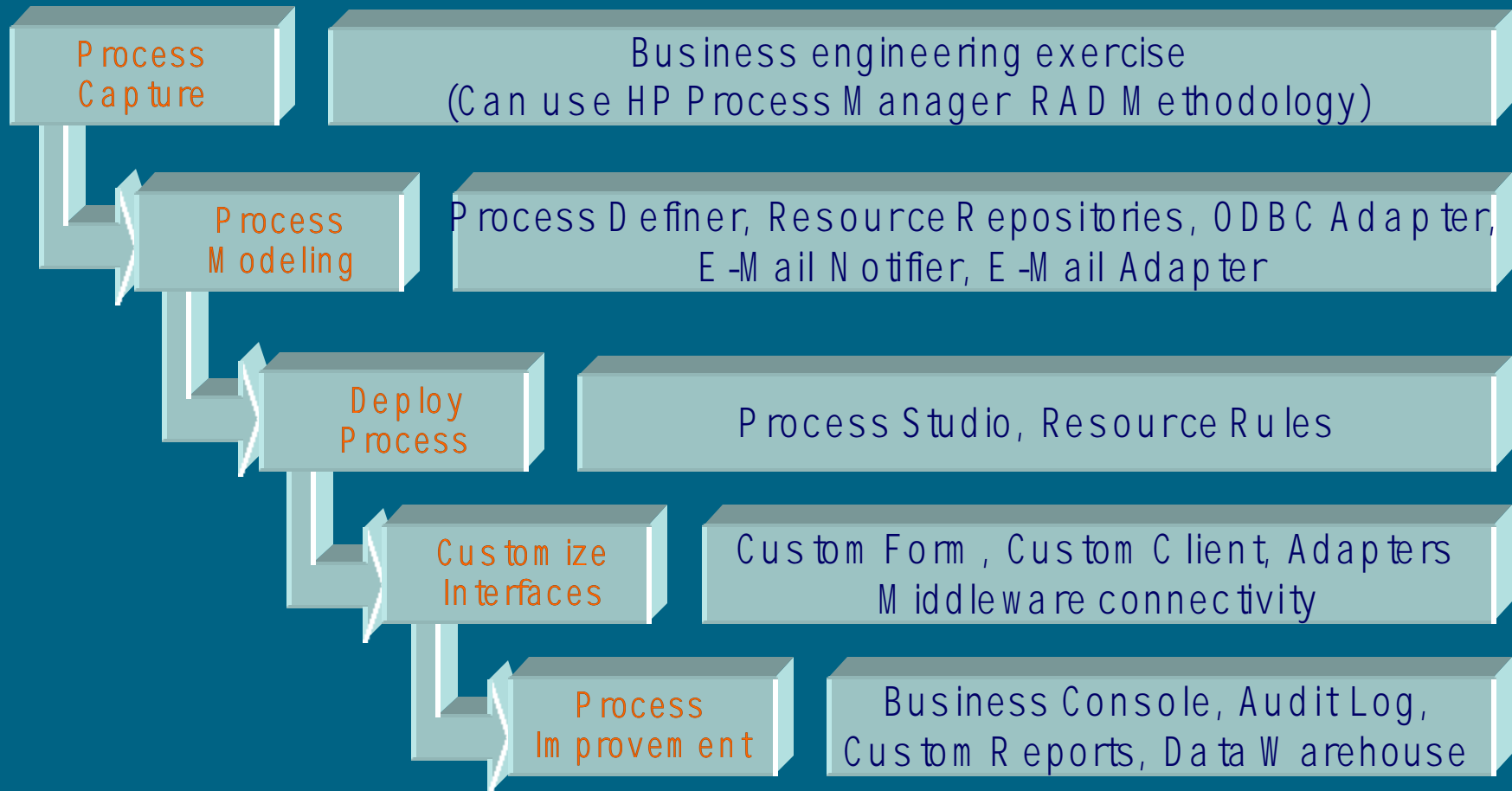
- greater control of the process
  - can track problems before they occur
- better planning
  - can cope with surges in demand
  - customers are not kept waiting for goods
  - reduction in over-production - less waste
- elimination of manual and paper-based procedures
  - reduction in time and effort
- which means increased sales

# creating a solution - an iterative approach



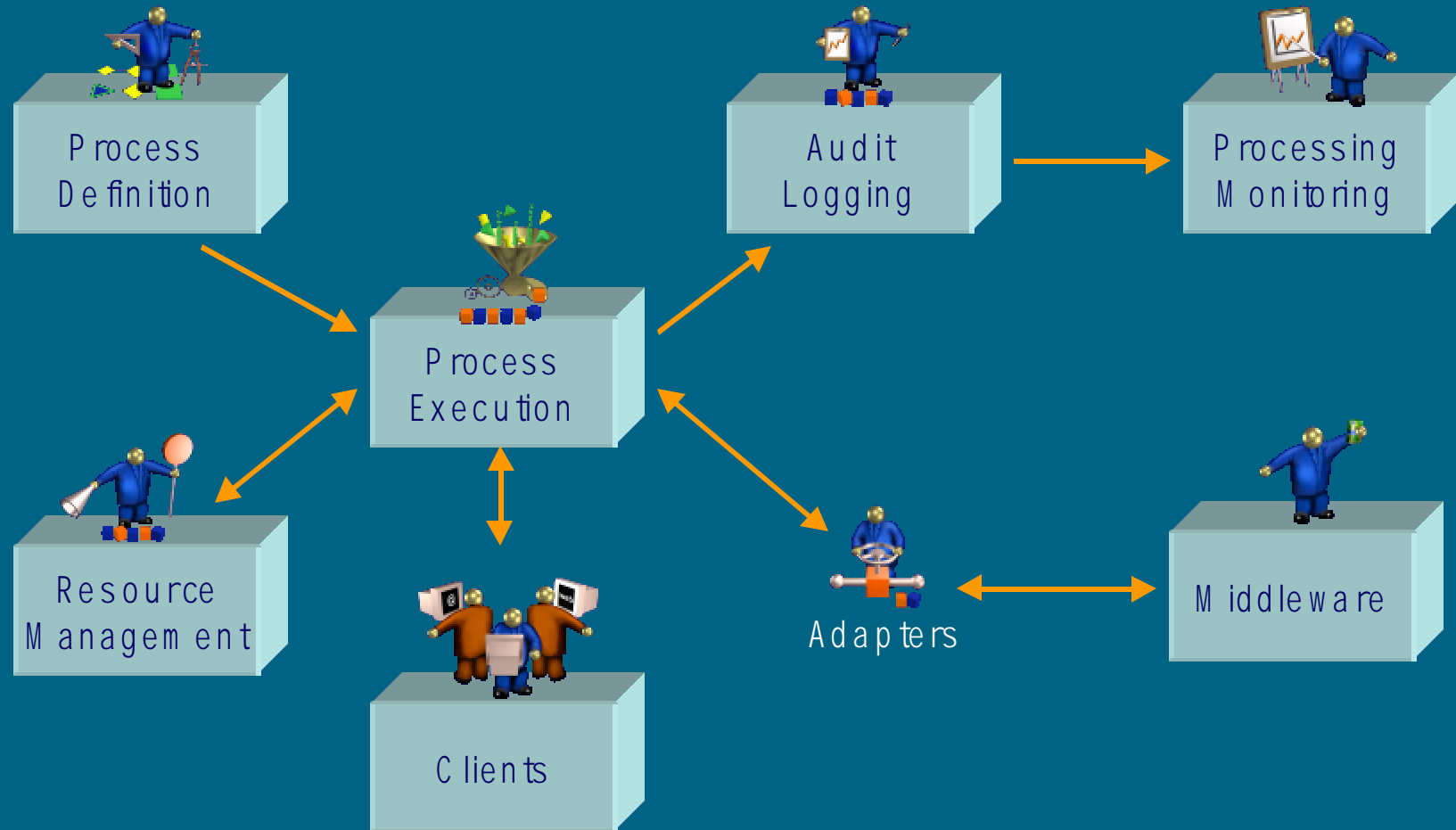


# hp process manager technologies used



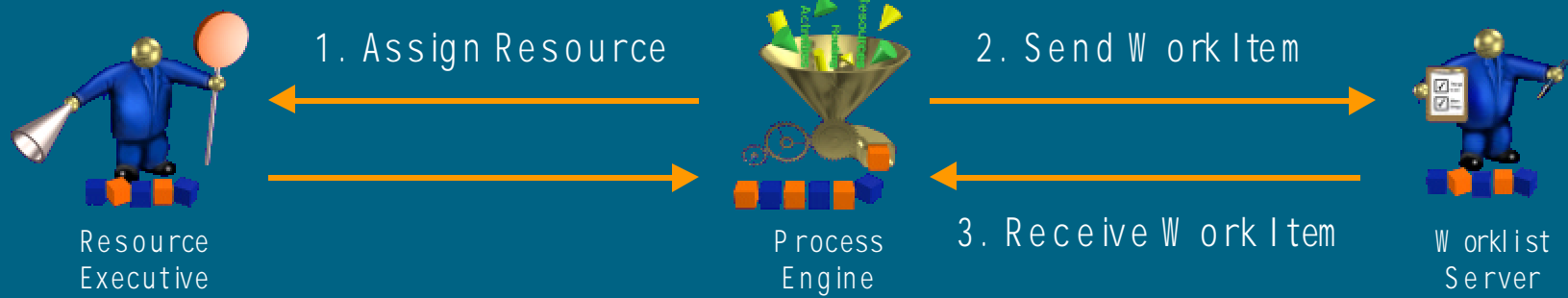
system architecture

# hp process manager architecture

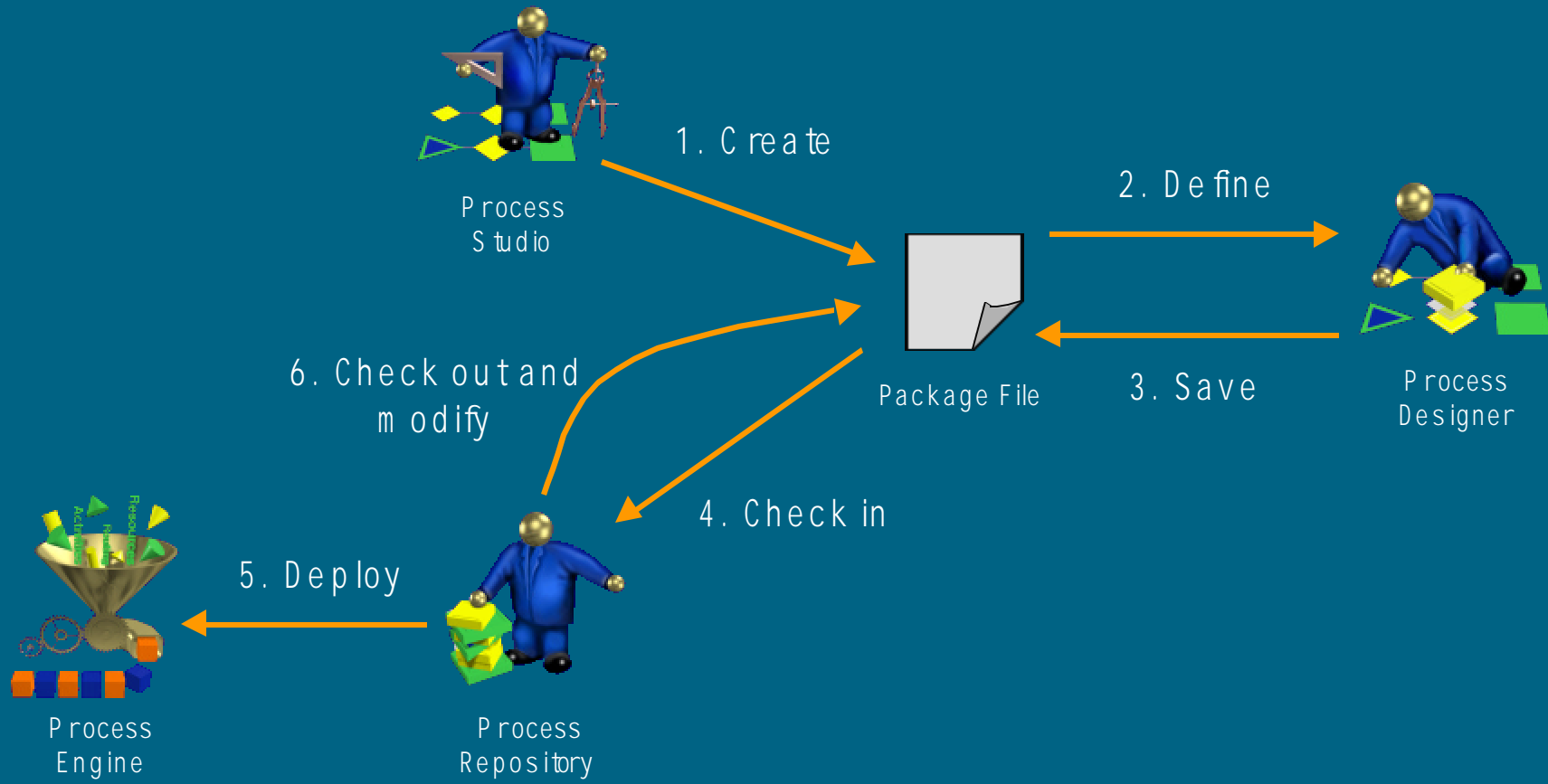




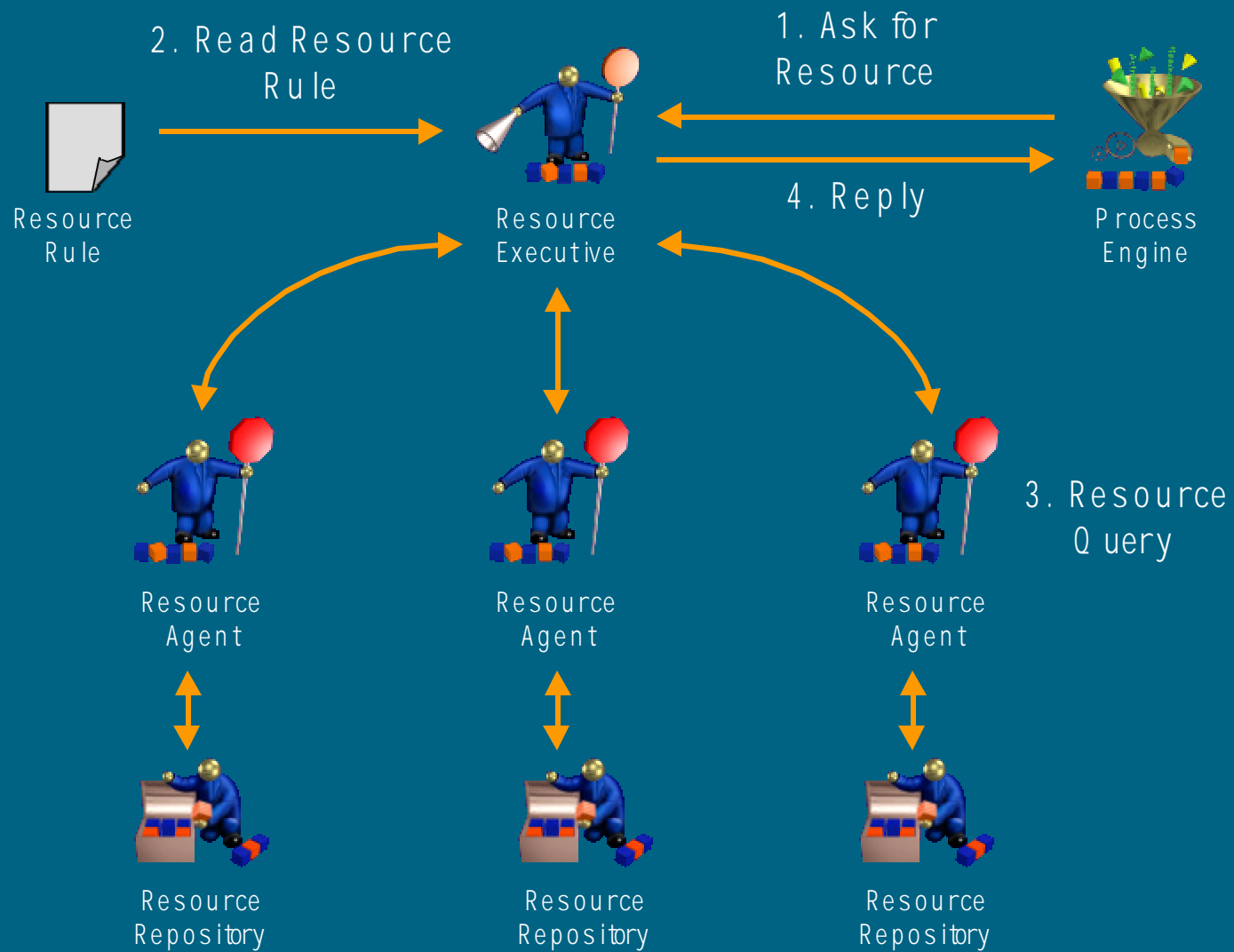
# process execution



# process definition

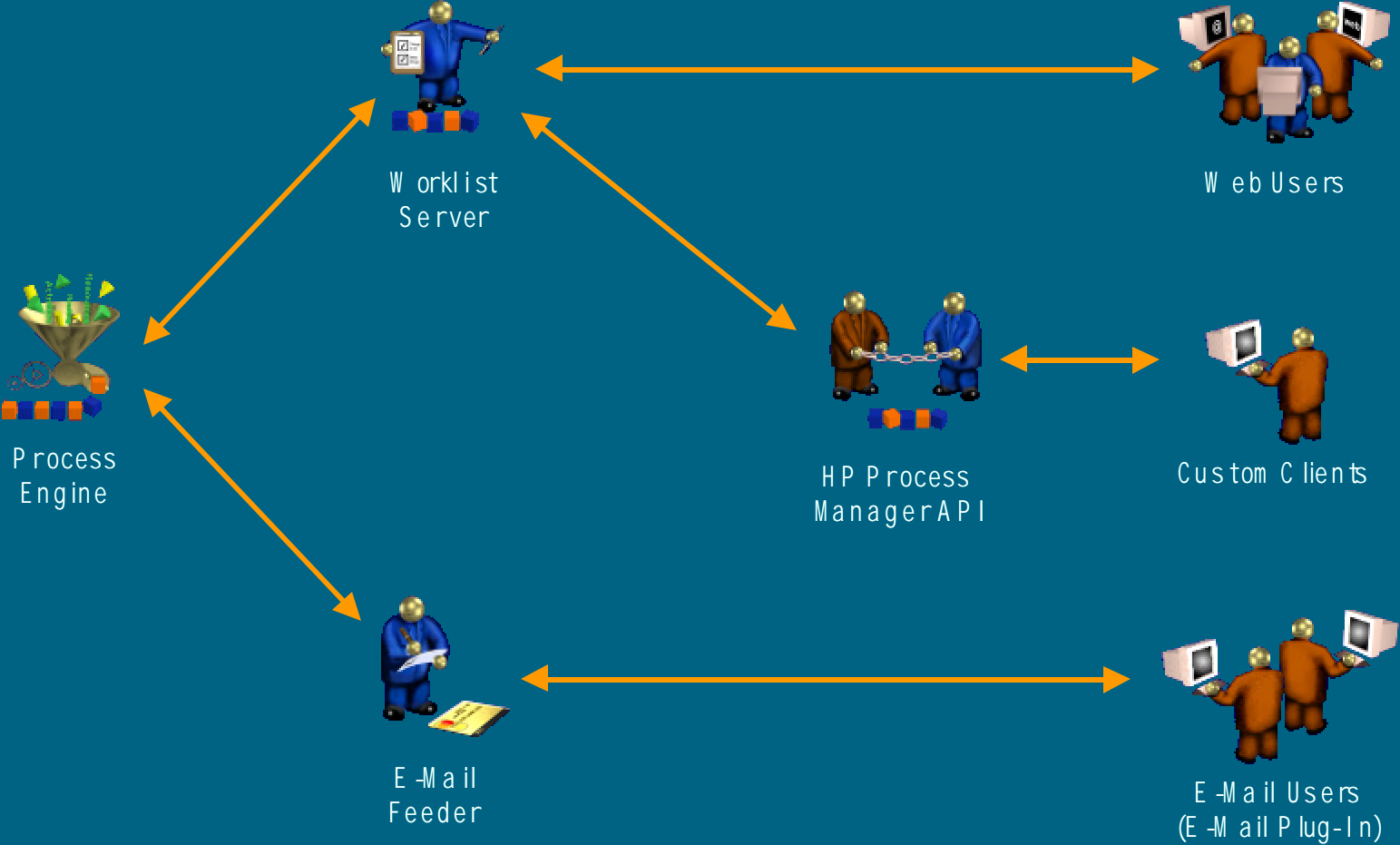


# resource management

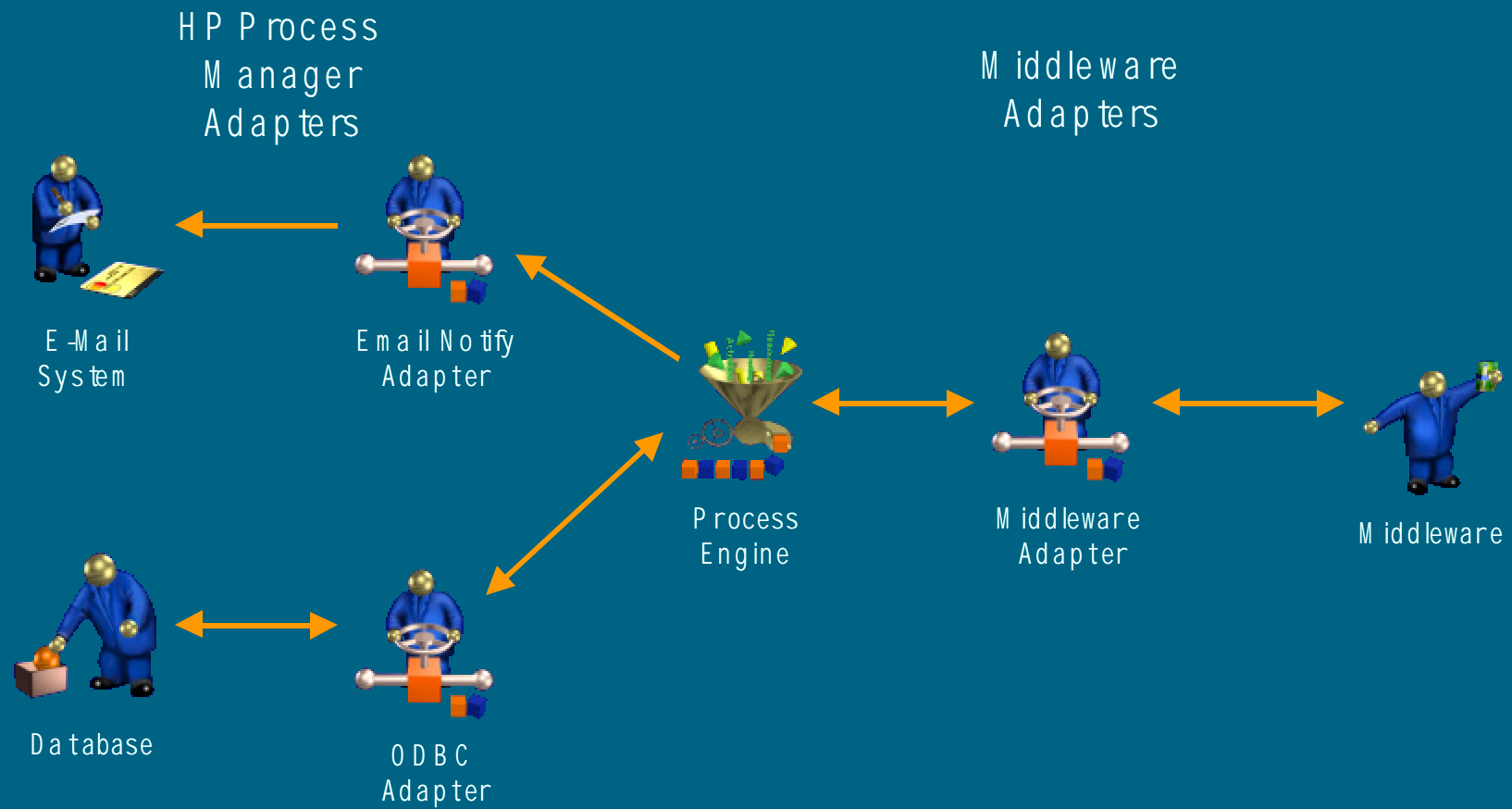




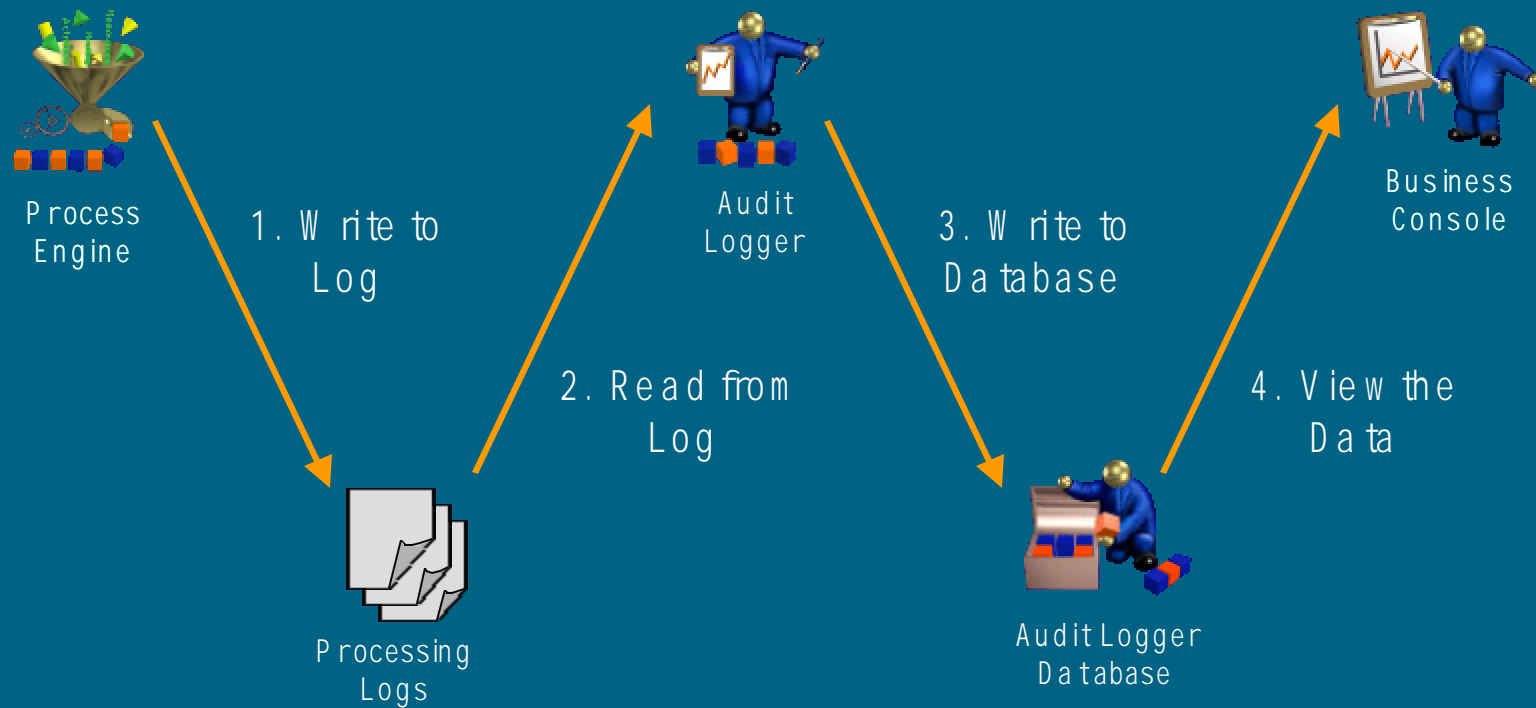
# clients



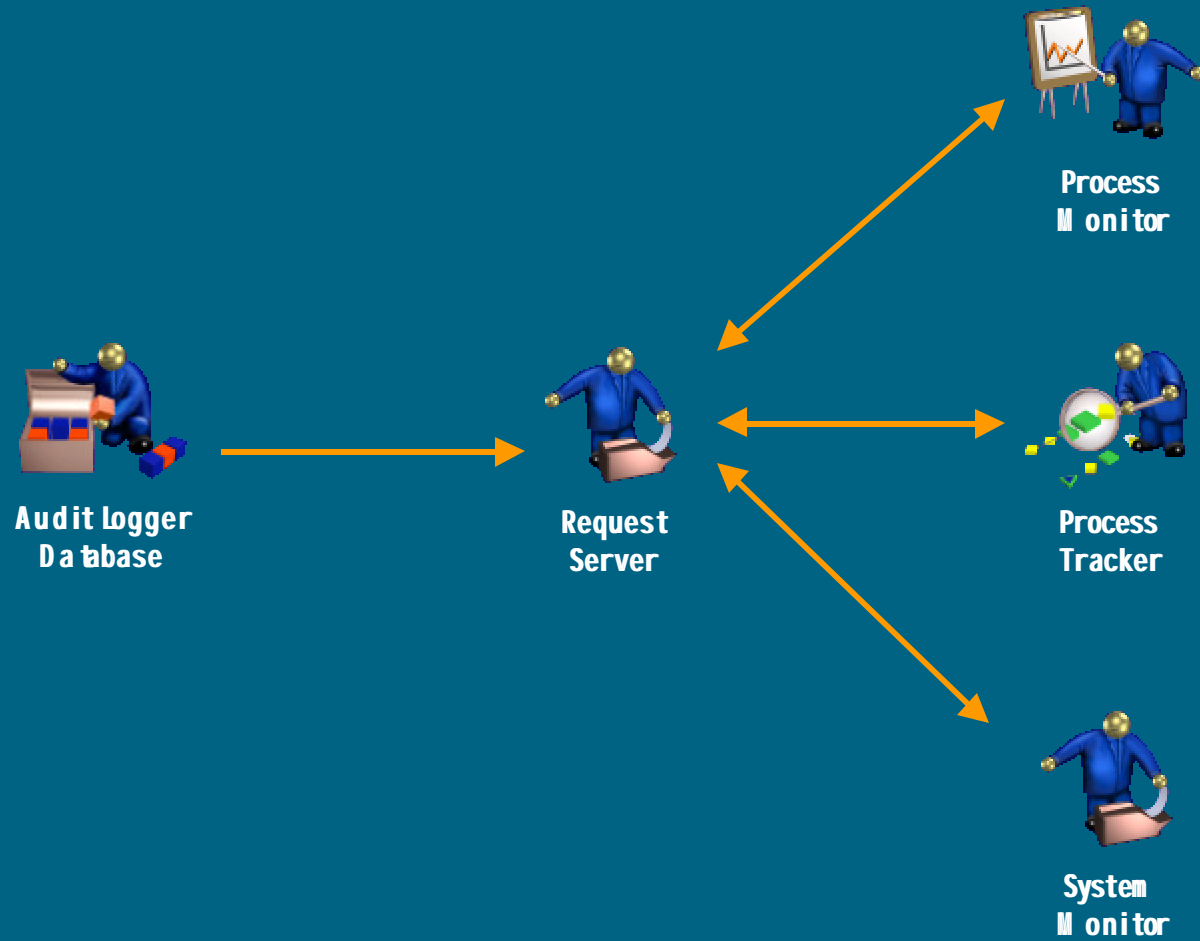
# adapters



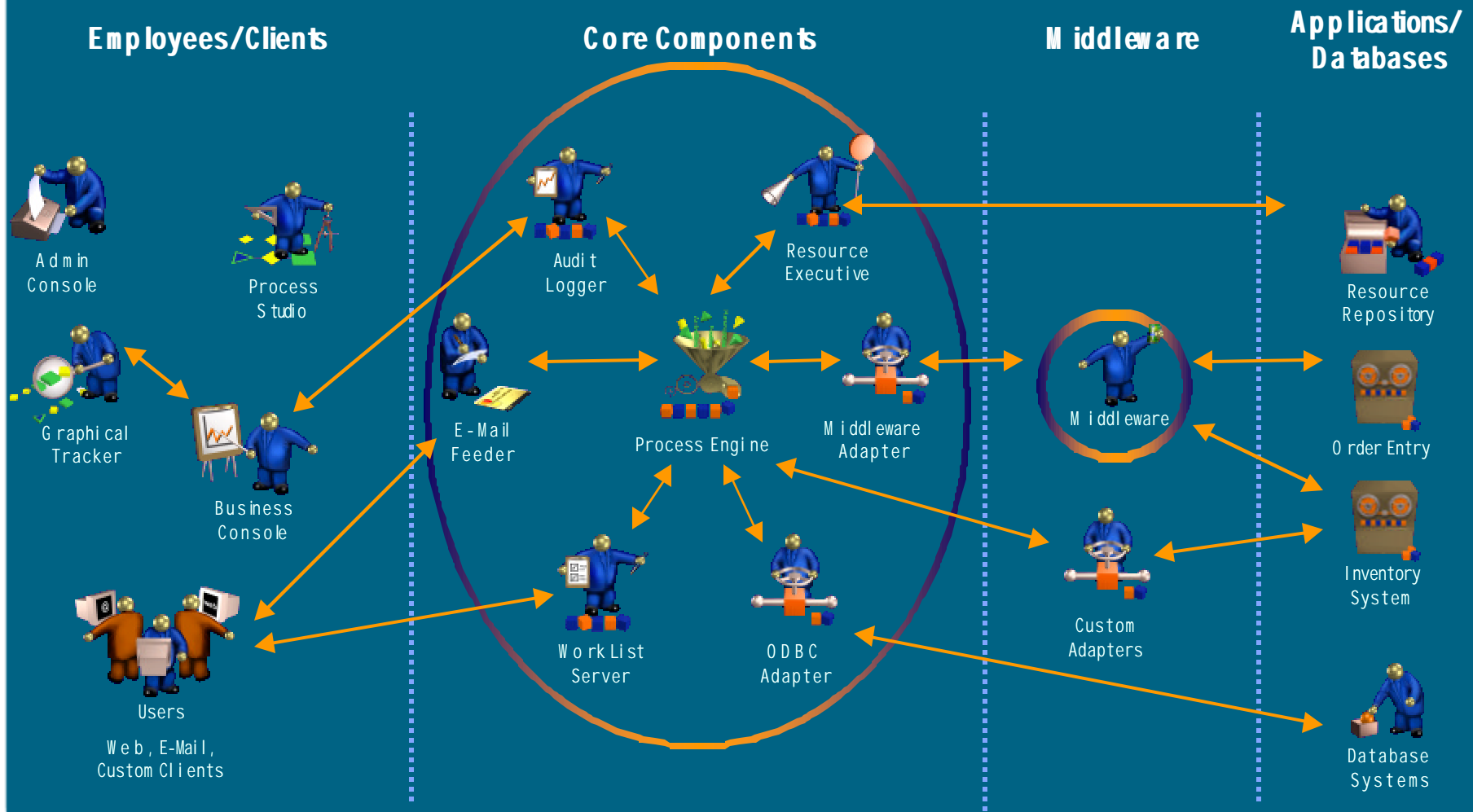
# audit logging



# process monitoring



# hp process manager components - the BIG picture!





# hp process manager consoles

Four Web-based interfaces:

- Work Area
  - Provides user access to work
- Process Studio
  - Provides developers access to process definitions, resource rules, services, etc
- Admin Console
  - Provides administration tasks
- Business Console
  - Allows business managers to track and monitor processes

# work area

Allows Users to...

- Start processes
- Access work in their personal work list
- Access work in shared work lists
- Complete work items
- Configure personal information
  - Password
  - Default data values,  
e.g. Employee Number

# work area - screen shot

The screenshot shows a web browser window titled "Changengine Work Area - Microsoft Internet Explorer provided by Hewlett Packard". The address bar contains the URL: `http://hppwdk66.pwd.hp.com/adminflow/cgi/bin/afwls.cgi/prof=C/sess=fe1128f7/cmd=main`. The page features the "Changengine" logo and a "Work Area" sidebar with navigation options: "Start process", "Your work", "Track work", "Personal info", and "Close". The main content area is titled "Work lists" and includes a "Help" button. A table displays the following data:

Work lists	Total items
<a href="#">Personal Work List</a>	1
<a href="#">Sent items</a>	92
<a href="#">Error Work List</a>	3
<a href="#">Flight Desk Worklist</a>	0
<a href="#">Hotel Desk Worklist</a>	0
<a href="#">Instructor</a>	1
<a href="#">Managers Worklist</a>	0
<a href="#">Training Administrator</a>	2
<a href="#">Travel Desk</a>	0

At the bottom of the page, the text reads: "HP Changengine, Version A.04.00.00" and "Copyright (c) Hewlett-Packard Company 1997-1999." The browser's status bar shows "Done" and "Local intranet zone".

# process studio

Allows Process Developers to...

- Create new processes
- Check-in, check-out or deploy...
  - Process definitions
  - Services
  - Custom forms
  - Resource/authorization rules
- Use the Process Repository for versioning of process definitions, custom forms and rules

# process studio - screen shot

The screenshot shows a web browser window titled "Changengine Process Studio - Microsoft Internet Explorer provided by Hewlett Packard". The address bar contains the URL: `http://hppwdk66.pwd.hp.com/adminflow/cgi/shell/C/repos/main.pl?comp=ps&prof=C&sess=fe1128f7`. The browser's menu bar includes File, Edit, View, Go, Favorites, and Help. The toolbar contains icons for Back, Forward, Stop, Refresh, Home, Search, Favorites, History, Channels, Fullscreen, Mail, Print, and Edit. The main content area is divided into a left sidebar and a main panel. The sidebar, on a blue background, features the "Changengine" logo, the text "Process Studio", and a navigation menu with items: Processes (selected), Services, Resource Rules, Authorization Rules, and Close. At the bottom of the sidebar is the HP logo and "HEWLETT PACKARD". The main panel has a header "Processes" with a "Help" button. Below this is a "Create" button and the text "Create a new process using the process definer." A horizontal line separates this from the text "Click on an existing Group or Process name to access its details." Below this is a tree view with two main categories: "Administration Processes" containing "Travel Request", and "Services" containing "SimpleMap", "ADSL", and "Car Recovery". At the bottom of the main panel is a "New Group" button. The footer of the page contains the text: "HP Changengine, Version A.04.00.00" and "Copyright (c) Hewlett-Packard Company 1997-1999." The browser's status bar at the bottom indicates "Local intranet zone".

Changengine  
Process Studio

- Processes
- Services
- Resource Rules
- Authorization Rules
- Close

HEWLETT  
PACKARD

## Processes

[Help](#)

[Create](#) a new process using the process definer. [Create](#)

---

Click on an existing Group or Process name to access its details.

- Administration Processes
  - Travel Request
- Services
  - SimpleMap
  - ADSL
  - Car Recovery

You can create a new [Process Group](#). [New Group](#)

(To add a new Process, first select the Group to which it will belong.)

HP Changengine, Version A.04.00.00  
Copyright (c) Hewlett-Packard Company 1997-1999.

Local intranet zone



# adm in console

Allows Administrators to...

- Monitor components
- Maintain users
- Configure components
- Administer remote HP Process Manager systems

# adm in console - screen shot start/stop components

**Changengine Admin Console - Microsoft Internet Explorer provided by Hewlett Packard**

Address: <http://hppwdk66.pwd.hp.com/adminflow/cgi/shell/C/adm/main.pl?comp=ac&prof=C&sess=fe1128f7>

### Start/Stop Components Help

Component	Status	Select	Log Level	Log Messages
HP Process Manager	●	<input type="checkbox"/>	Major Events	
Process Executor	●			
Process Definer	●			
Process Monitor	●			
Resource Executive	●	<input type="checkbox"/>	Major Events	None
Data Dereferencer	●	<input type="checkbox"/>	Major Events	None
Oracle Resource Agent	●	<input type="checkbox"/>	Major Events	None
Request Server	●	<input type="checkbox"/>	Major Events	None
Audit Logger	●	<input type="checkbox"/>	Major Events	None
Template Server	●	<input type="checkbox"/>	Major Events	None
Worklist Receiver	●	<input type="checkbox"/>	Major Events	None
Worklist Server	●	<input type="checkbox"/>	Major Events	None
Service Repository RA	●	<input type="checkbox"/>	Major Events	None
Example URA	●	<input type="checkbox"/>	Major Events	None

**Start All**   **Start Selected**   **Restart All**  
**Stop All**   **Stop Selected**   **Settings**

Local intranet zone

# business console

Allows Business Managers to...

- View Audit information for processes
- Track process execution
- Monitor the performance of processes
- View custom reports



**Business Console**



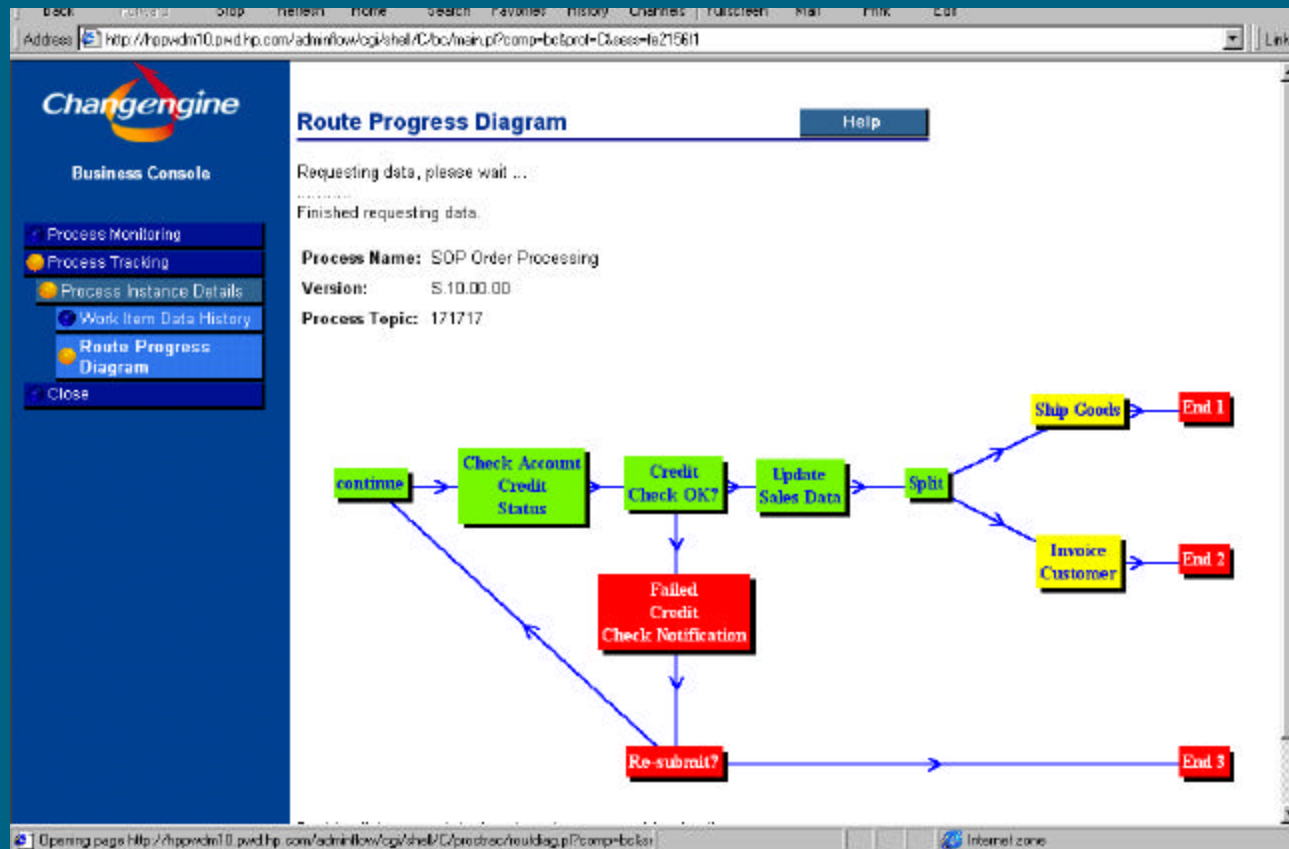
**Audit logger**

# business console - process tracker

Allows a Business Manager to...

- Track an individual process instance
- View a process instance in diagrammatic form

# process tracker - screen shot process diagram



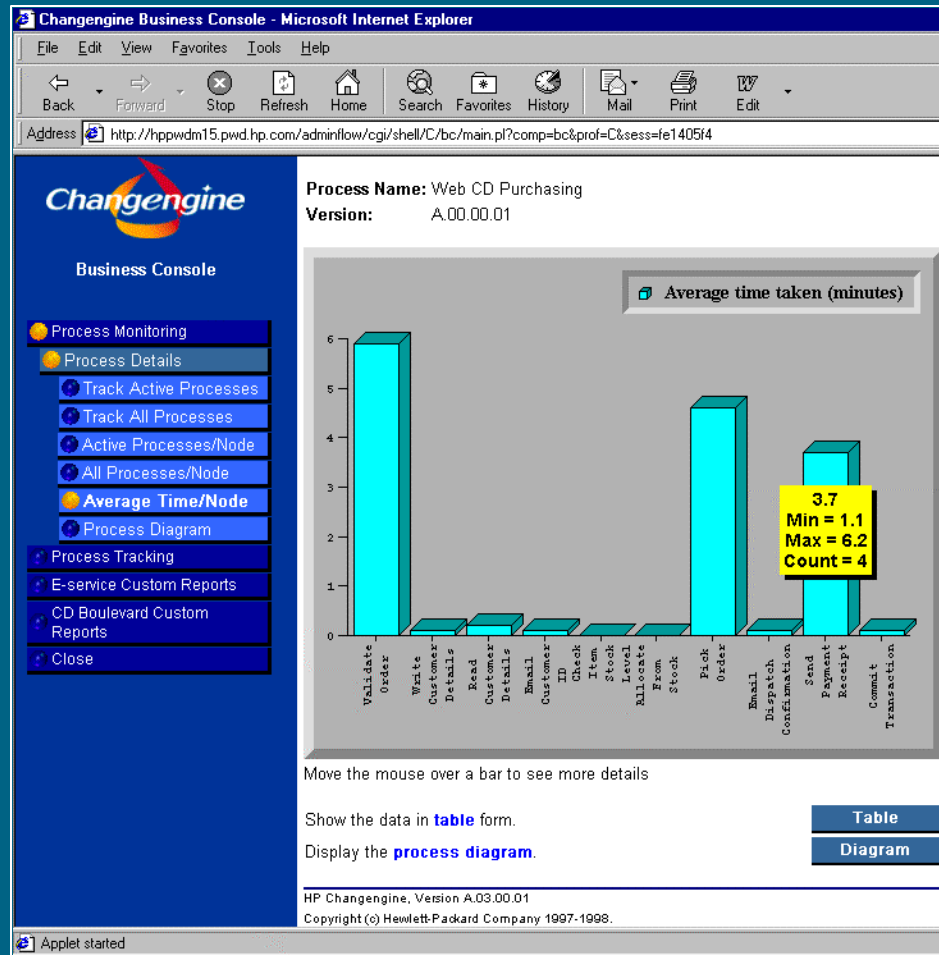


# business console - process monitor

Allows a Business Manager to...

- Monitor individual customer cases
- View weekly, monthly and daily averages
- Identify bottlenecks
- Combine Process data with Business data
- View chart based statistics

# process monitor - screen shot ave time/node



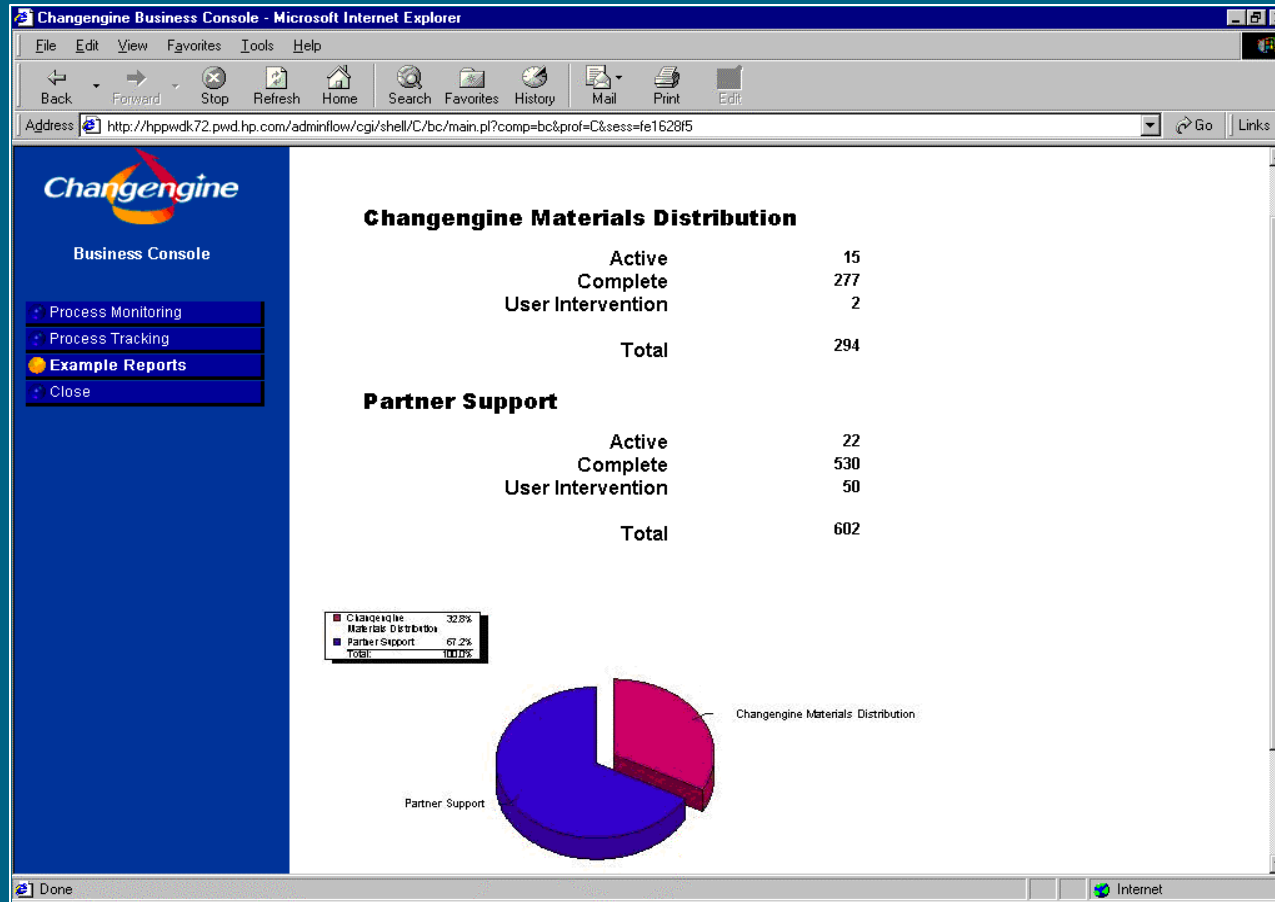
# business console - custom reports

Allows a Business Manager to...

- Use 3rd party reporting tools to produce custom reports
- View reports based on data in the Audit Logger database



# custom reports - screen shot using 3rd party tool



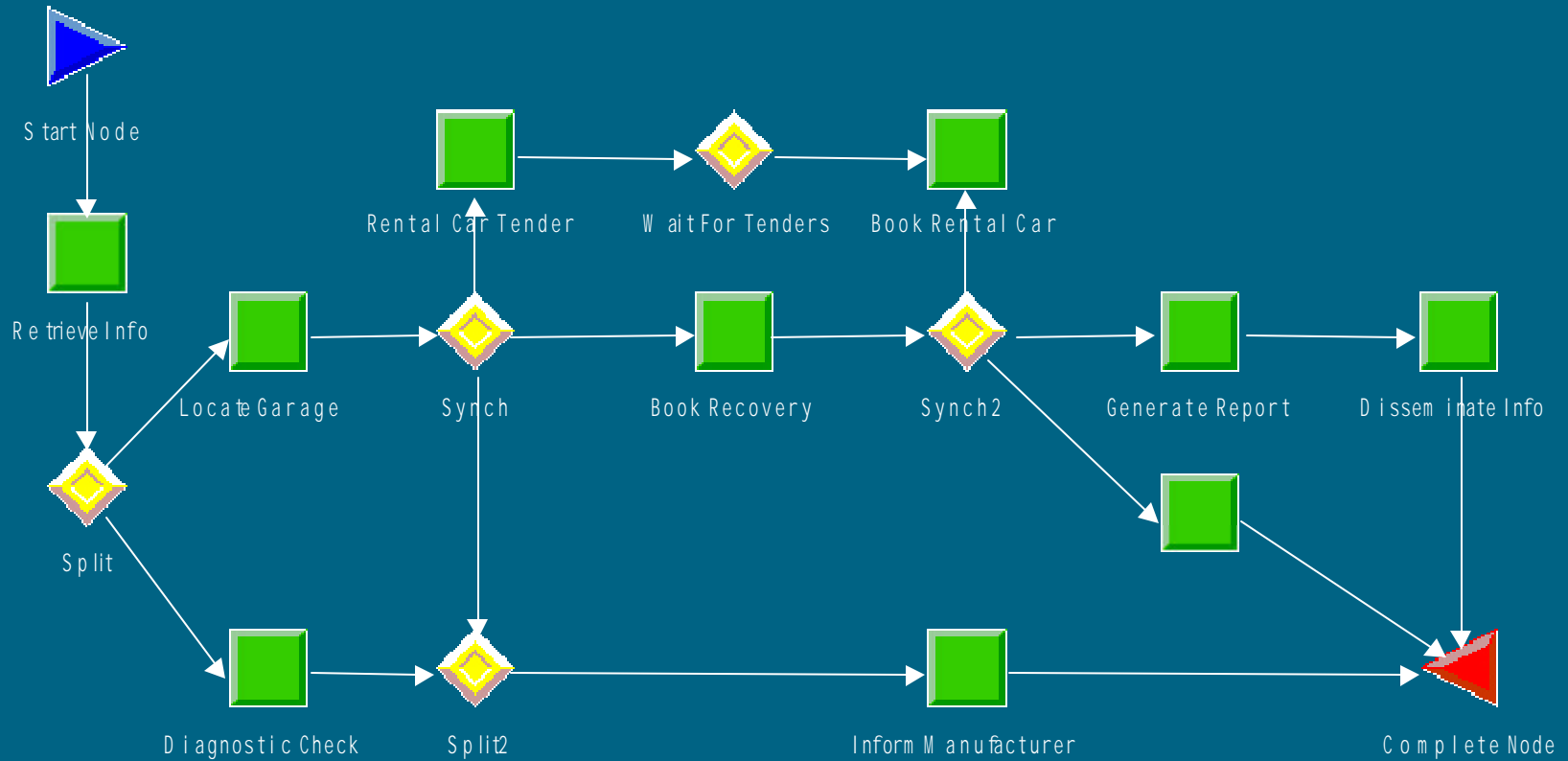
process development

# what is a process?

- Defined with Process Designer
- Series of tasks (work nodes)
- Resource Rules specify who carries out work
- Decision points (Route Nodes)
- Work is automatically sent to recipient
  - Work List (web, email, custom client)
  - Adapter
- Processes can be...
  - Across Departments
  - Across the Enterprise
  - Across companies - include customers and suppliers



# example process diagram

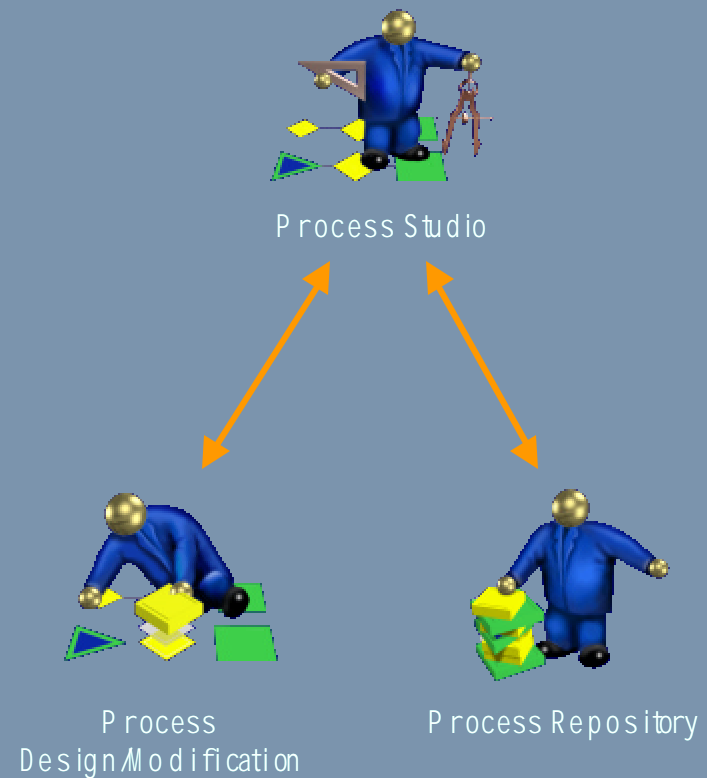


# sub-processes

- Mark a process as a sub-process
- Need to specify the interface
  - Inputs
  - Outputs
- Allows a process to be used in other processes
- Provides structure to processes
- Reuse common procedures
  - Reusable business objects
  - Fast development times

# process studio

- Provides management of...
  - Processes
  - Services
  - Rules
- Used by business analyst or manager
- Uses a Process Repository
  - Stores processes, services and rules
  - Provides version control

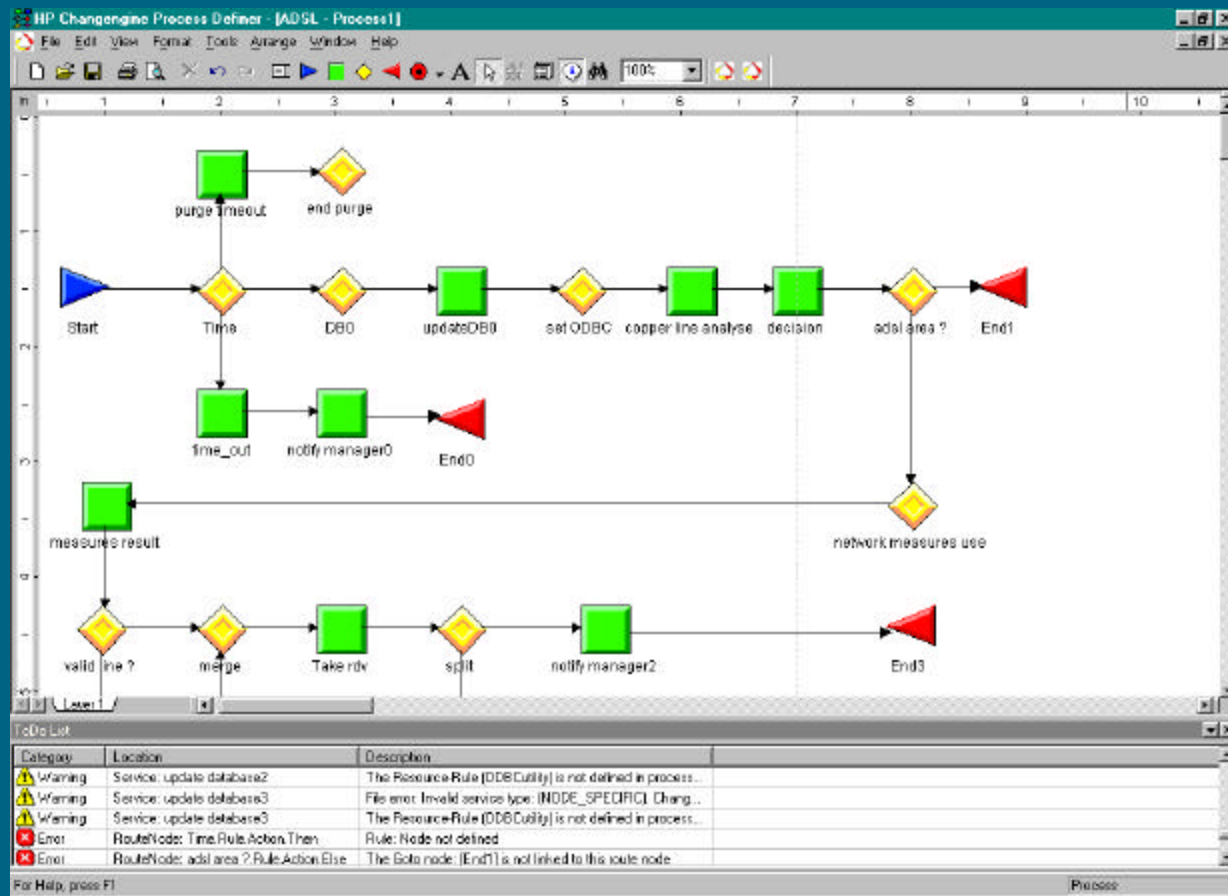


# process definer

An industrial-strength process definer..

- A third-party application from Micrografix (iGrafx)
- Supports off-line working
- Supports XML-Process - HP Process Manager's process definition language
- Service oriented
- Superior user interface

# process definer - screen shot



## services - in generic terms

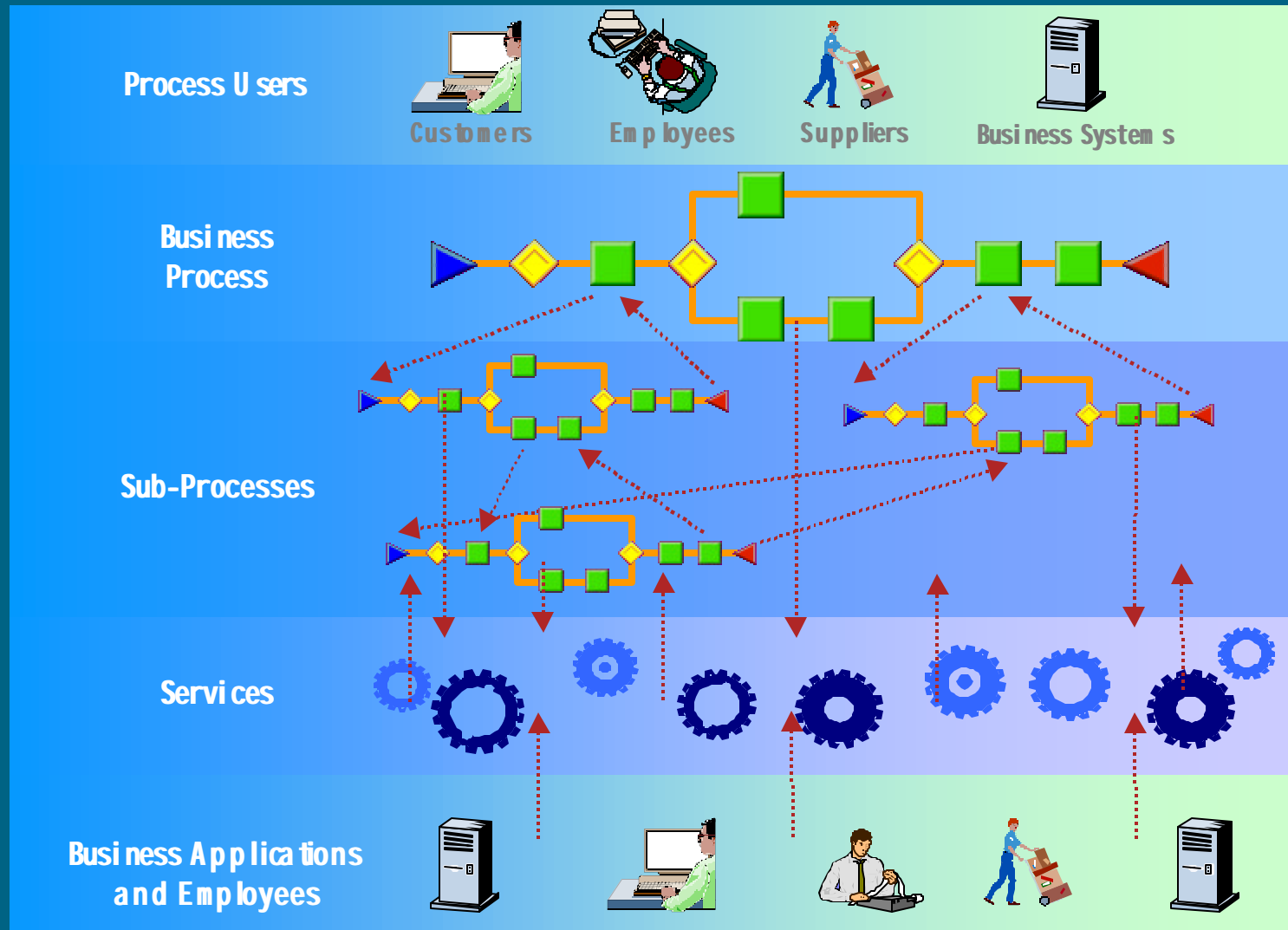
- Services are meaningful business functions
- Services have a clearly defined interface
  - Identity (name)
  - Inputs
  - Outputs (Results)
- Services are reusable
- Services can be compound

*"One man's service is another man's process"*

# services - in bpm process manager terms

- Services are reusable Activities
- Services can be constructed from ...
  - User based activities (WLS)
  - Subprocesses
  - Adapters
- Services can be predefined

# service abstraction in hp process manager





# resource allocation

- Powerful feature of HP Process Manager
- Complex resolution of work allocation
- Handled by the Resource Executive
  - Use one or more Resource Repositories
- Use existing corporate databases
- Handle complex work patterns:
  - Shift Work
  - Remote/Local Working
  - Load balancing
  - Escalation rules



Resource Executive



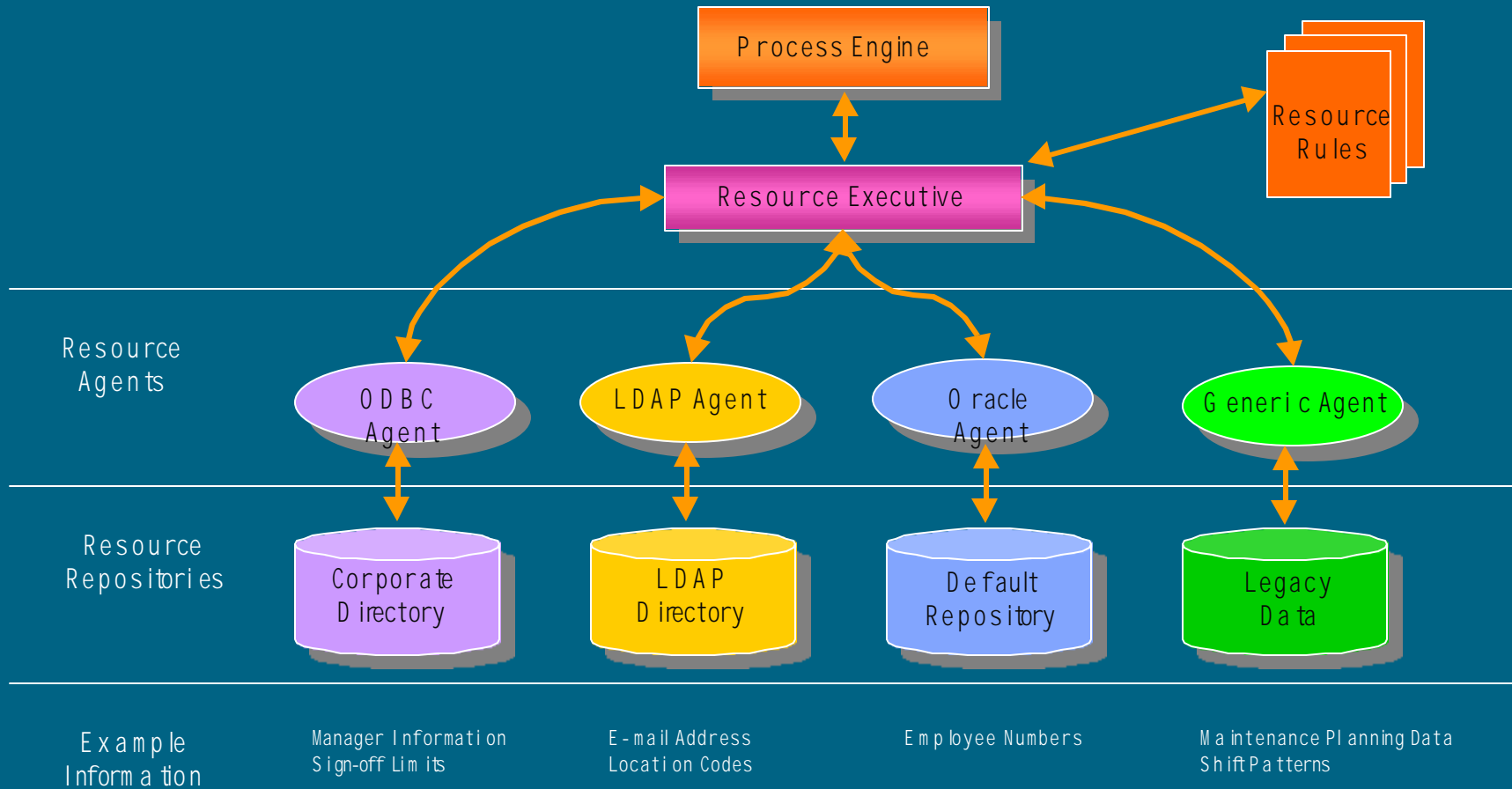
Resource Repository

# who performs a task?

A task can be performed by:

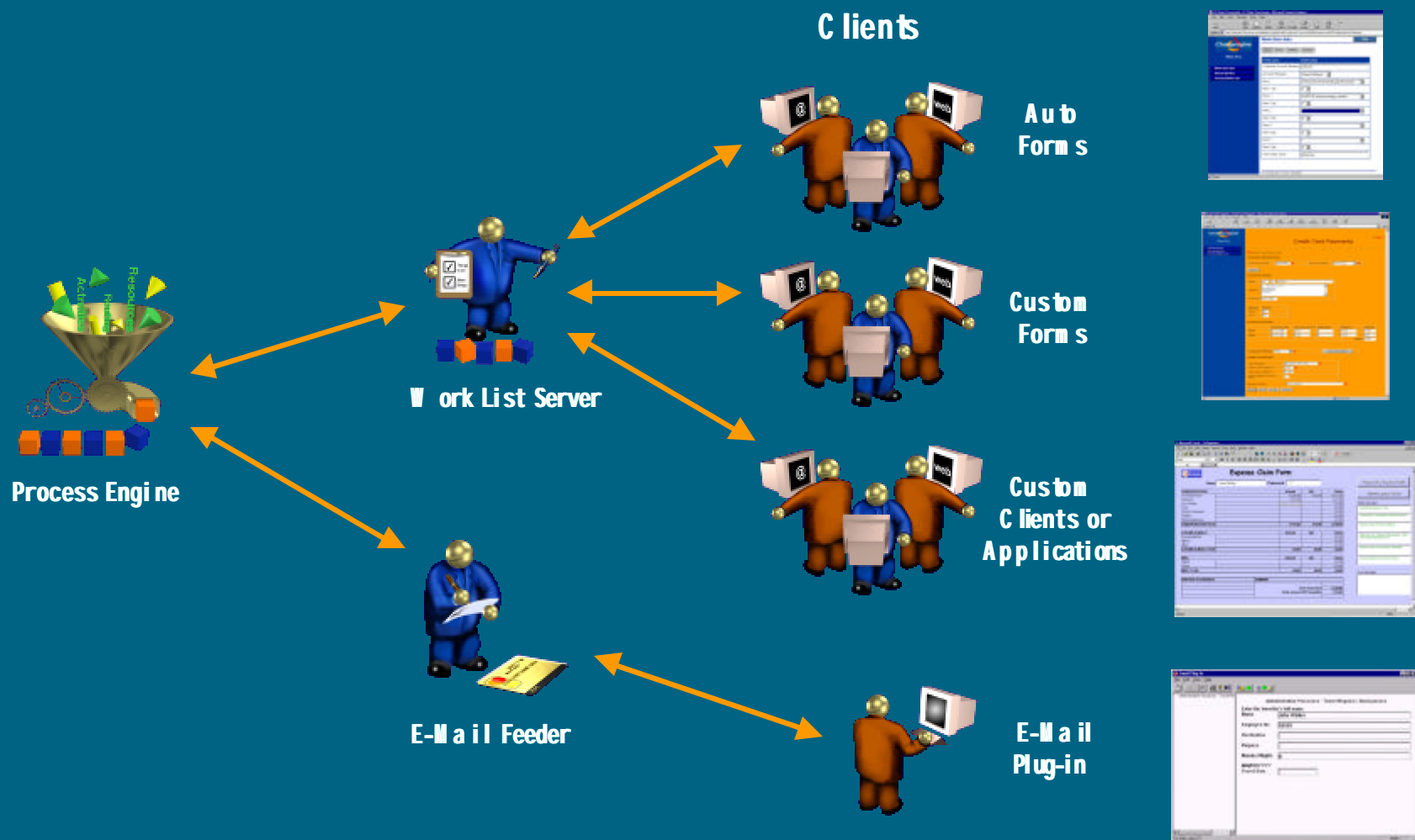
- A Person
  - Web Client
  - E-mail Client
  - Custom Client
- A Subprocess
- An Application
  - Automated Client that polls WorklistServer
  - Business Application via an adapter
  - ODBC Adapter
  - E-Mail Notification

# multiple resource agents



hp process manager  
clients

# hp process manager 'clients'



# screen shot - default form

EP Order Processing - EP Order Processing - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit

Address <http://hppwdm15.pwd.hp.com/adminflow/cgi/bin/afws.cgi/prof=C/sess=fe1405f4/queue=John032Walker/Item=8/cmd=item> Go Links >>

**Changengine**

Work Area

- Work item data
- Item properties
- Personal Work List

**Work item data** Help

Send Save Delete Cancel

Field name	Field value
Customer Account Number	CR1267
Account Manager	Susan Fletcher
Item 1	THC332 Environmental graviton panel
Item 1 qty.	2
Item 2	WRF142 Impulse energy nacelle
Item 2 qty.	1
Item 3	
Item 3 qty.	0
Item 4	
Item 4 qty.	0
Item 5	
Item 5 qty.	0
Total Order Value	\$1560.50

HP Changengine, Version A.03.00.01

Done Internet

# screen shot - custom form

**Changengine**  
Work Area

- Custom Items
- Item Properties
- Personal Work List

## Credit Card Payments

denotes mandatory field

**Customer Identification**

Account Number: 425810000  Source System: Avon(AV)

**Customer Details**

Name: Mr M Dobson

Address: 1 Priory Lane  
Boughton  
Surrey

PostCode: HE42 6BS

**Service**      **Status**

Tele: AC

City: AC

**Account Summary**

	Last Pay Date	Last Pay Amount	Delinquent	Balance	Payment
Tele	20-12-1998	14.99	0	14.99	14.99
City	20-12-1998	14.99	0	14.99	0.00
				<b>TOTAL</b>	14.99

Payment Method: MSA

**Credit Card Details**

Card Number: 4639 6545 7363 7635

Expiry Date (MM/YY): 12/00

Valid From (MM/YY): 11/98

Issue Number (Switch only):

Operator Name: John Walker

# screen shot - custom client using Microsoft Excel

Microsoft Excel - CeExpenses

File Edit View Insert Format Tools Data Window Help

18

## Expense Claim Form

Powered by Changengine

Name: Susan Fletcher Password: xxxxxx

Prepare New Expense Claim

Submit Expense Claim

Status Messages

- Submitting Expense Claim .....
- Connecting...Connected to WorkList Server
- Expense Claim Process Initiated.
- Data items set...Attached Spreadsheet: C:\My Documents\CeExpenses.xls
- Expense Claim Successfully Submitted!
- Disconnected from WorkList Server.

Error Messages

TRANSPORTATION	Amount	VAT	Totals
Fuel Expenses	£100.00	£15.00	£115.00
Parking	£15.00		£15.00
Car Rental			£0.00
Taxi			£0.00
Public Transport			£0.00
Airfare			£0.00
Other Expenses			£0.00
<b>TRANSPORTATION TOTAL</b>	<b>£115.00</b>	<b>£15.00</b>	<b>£130.00</b>

LODGING & MEALS	Amount	VAT	Totals
Accommodation			£0.00
Meals			£0.00
Misc			£0.00
<b>LODGING &amp; MEALS TOTAL</b>	<b>£0.00</b>	<b>£0.00</b>	<b>£0.00</b>

MISC.	Amount	VAT	Totals
Other			£0.00
Other			£0.00
<b>MISC. TOTAL</b>	<b>£0.00</b>	<b>£0.00</b>	<b>£0.00</b>

PURPOSE OF EXPENSES	SUMMARY
	Total Expenses
	£130.00
	Total amount VAT payable
	£15.00

Ready

NUM



# screen shot - e-mail plug-in

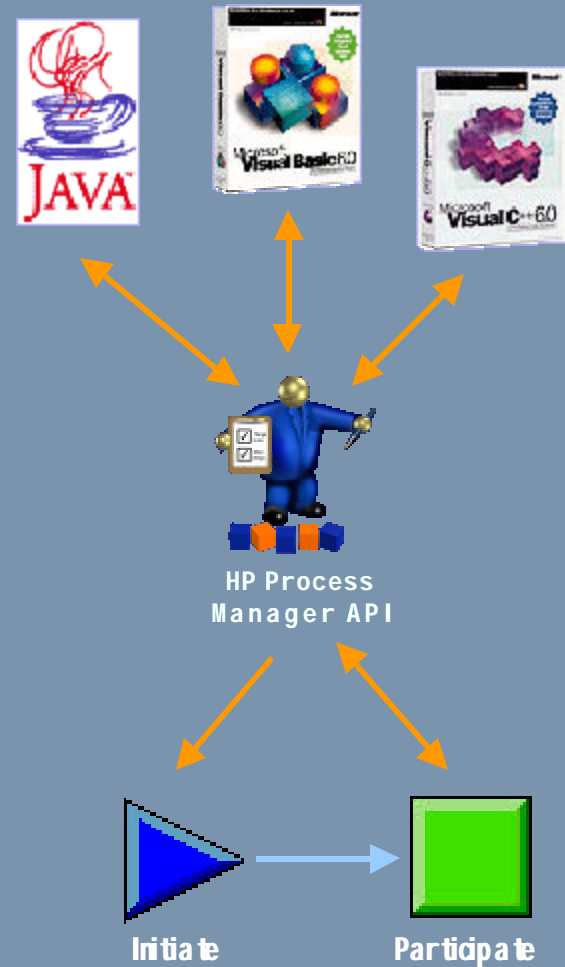
The screenshot shows a software window titled "Email Plug-In" with a menu bar (File, Edit, View, Help) and a toolbar. The main content area is titled "Administration Processes - Travel Request : Start process" and contains a form with the following fields:

- Enter the traveller's full name**
- Name**:
- Employee No**:
- Destination**:
- Purpose**:
- Number Nights**:
- MM/DD/YYYY**
- Travel Date**:

At the bottom left, it says "For Help, press F1". At the bottom right, there is a button labeled "NUM".

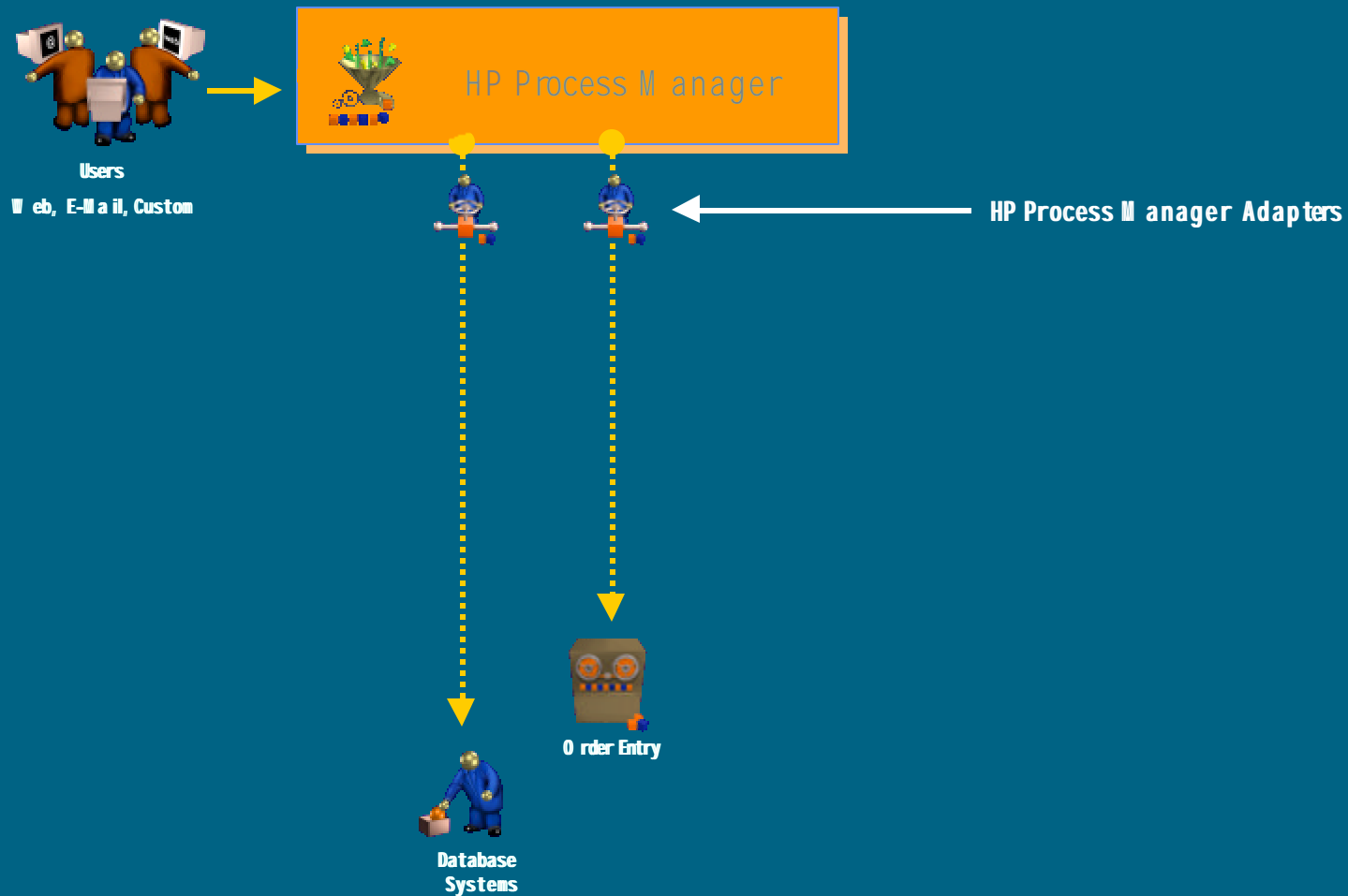
# custom clients

- Use the HP Process Manager API
  - JavaBeans
  - COM Objects
- Supports many languages, including:
  - VisualBasic
  - Java
- Provides full WorklistServer access:
  - Connect
  - Start processes
  - Get work
  - Action work

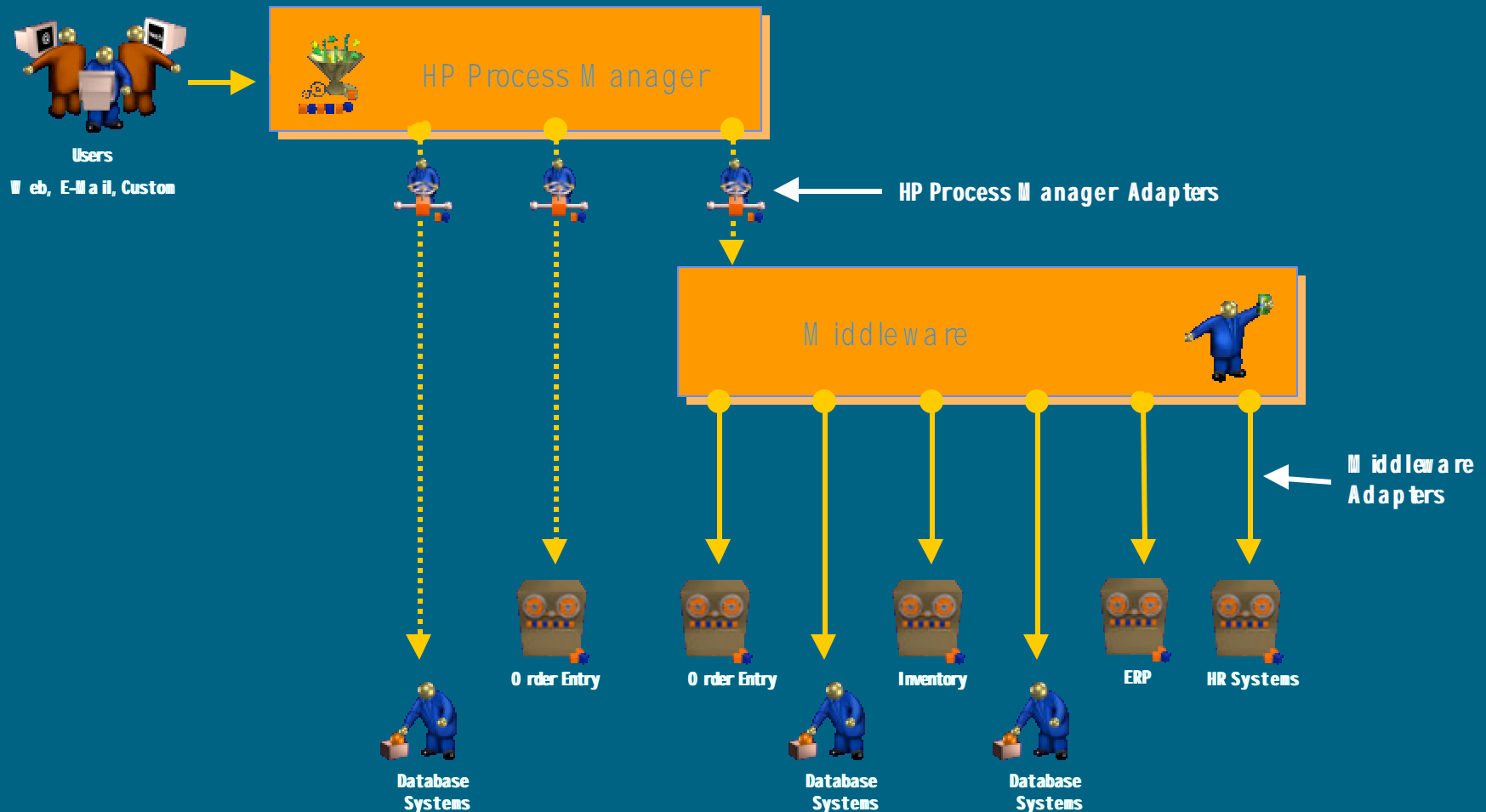


application integration

# hp process manager integration - business applications/data



# Middleware integration - business applications/data



## integration with business applications/data

- Use strengths of Process and Middleware technologies
- High re-use of Application Adapters
- Leverage investment in existing middleware infrastructure
- Makes end-to-end process development even quicker
- Referred to as Enterprise Application Integration (EAI).

# hp process manager 'adapters' - ODBC adapter

- Access application Data from within a Process
- Retrieve application Information
- Update application information
- All major databases support ODBC
- Available on both Windows NT and HP-UX
  - Native to Windows NT
  - On HP-UX use OpenLink

## hp process manager 'adapters' - email notifier adapter

- Sends out 'text message' over email
- Useful for notification messages
  - No reply is expected
  - If want reply, use Email Feeder instead
- Examples:
  - Send message to manager about work
  - Send message to suppliers
  - Send Acknowledgements to customers



## summary

- Powerful environment for rapidly creating process centric solutions
- High level process definition
- Sophisticated resource allocation
- Client/user interface of choice
- Leverage existing applications
- Measure, monitor and incrementally improve end-to-end business processes
  - Behind Web-sites
  - Behind Call Centres
  - Provisioning of goods/services



[www.hp.com/go/e-process](http://www.hp.com/go/e-process)