

Using HP DeskManager Intrinsics for Custom Applications
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Introduction

What this paper talks about:

This paper discusses the integration facilities available in HP DeskManager and introduces HP DeskManager Intrinsics. It describes:

- Integration features available with HP DeskManager and how they can be applied.
 - Script files
 - Application Data passing
- HP DeskManager Intrinsics
 - What are they?
 - Who should use them?
 - When should they be used?
- Three Scenario's where the Intrinsics could provide profit improvements for an organization.

HP DeskManager

HP DeskManager's electronic mail system includes everything the most sophisticated users have come to expect from an integrated business system. Word processing documents, graphics files and meeting appointments can be sent and received across the whole network. To avoid repeated messages and delays, acknowledgments can be set to track the progress of the mail. Users can find out whether their messages have been sent, delivered, read or replied to. Users can also have their mail automatically forwarded to another location. Or, using Auto Answer, they can compose a standard reply which HP DeskManager will automatically send. Users can allow secretaries or co-workers to access their systems as a "designate" - within specified limitations. HP DeskManager includes a high level of system security which reduces the chances of unauthorized access. Access to certain applications can be limited to either system-wide or to specific groups of users.

Every HP DeskManager user has a personal electronic filing cabinet in which documents and messages are filed away in folders. Users can create as many folders as they need (including folders within folders) and nominate other users to share those folders. To ensure privacy users can set passwords on any folder that they have created. All users on the same HP DeskManager node can share Public Distribution Lists and the Notice board. These contain items of interest to everyone, such as commercial distribution lists and weekly newsletters. For more sophisticated filing there is an add-on product called HP File/Library. This is a community filing product which allows documents to be shared by controlled groups of users. Documents are indexed by up to eight attributes: Subject, Creator, Create Date, File Type, Status, Keywords, Author Name and Comments. Keywords and Comments can be added to provide a unique description of an item to help speed the retrieval of that item.

HP DeskManager's time management system ensures that every time a user logs-on to HP DeskManager, the Calendar lists the number of the appointments and ToDo items for that day. More detailed information is available in the Calendar Area, where appointments can be displayed or printed by the day, week or month.

HP NewWave is an advanced application environment which builds upon Microsoft Windows 2.0. It presents the end user with icons on the screen, representing the common tasks people accomplish in an office. With HP DeskManager, we provide NewWave integration by allowing editable document exchange between HP DeskManager, AdvanceMail and NewWave mail users.

There are now over 4500 installations of HP DeskManager worldwide. The product is now localized in nine European languages - German, French, Italian, Spanish, Norwegian, Swedish, Dutch, Danish, and Finnish.

With the B.02.00 release of HP DeskManager last year we have seen greatly improved performance compared to its predecessor, version B.00.00.

- CPU consumption of HP Desk version B.02.00 has been reduced by approx. 22% compared to B.00.00.
- Disc I/O has been brought down to an even greater level - 31%.

HP DESKMANAGER...

- ★ Electronic Mail
- ★ Personal Filing/Time Management
- ★ Application Umbrella
- ★ Task Automation
- ★ Customization
- ★ Forms Processing
- ★ NewWave Integration
- ★ Over 4500 Installations WorldWide

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HP DeskManager - A Solution that works the way you work

The last thing you want from an office system is to have to adapt to a new way of working. With HP DeskManager you adapt the system to the way you want to work.

Integration

Variables can be customized at the individual level to allow users to see what they want to see:

- Order items in the Inray and other areas
- Printer and environment file details
- Default editor for text items

Customizable at a system - wide level

- Function key labeling
- Message header
- Welcome banners
- On-screen help information

Benefit:

- Total system is configurable for ease of use
- Saves the user time since trays and displays are ordered, organized and viewed to meet special needs.

Suspend and Resume

Allows users to suspend work in one HP Desk area, move to another, do some work and return to original work location. Just like you would with paper files on your desk.

Benefit:

- Matches the interrupt-driven way we work

Forms Processing

Forms, created with VPLUS/3000, can be distributed, filled in, returned and collated e.g. time sheets.

Benefit:

Saves time by

- Providing electronic mailing and filing for all forms-based tasks
- Not having to re-enter data taken from a data base into a document.

Built in document converters

HP DeskManager comes complete with built-in document converters e.g. HP Word to Executive MemoMaker.

Benefit:

Converters work transparently so users of different word processors can read or print documents without worry. If editing is necessary, the converters perform the task swiftly and easily. Users learn and become productive more quickly.

THE INTEGRATED ENVIRONMENT

HP DESKMANAGER



*Simplifies the Interface
to the End User*



*Provides Controlled Access
to Applications and MPE*



*Integrates Communication
with the Application*

INTEGRATION OF APPLICATIONS AND INFORMATION

- * Add mailing functionality to a HP3000 application.
- * Simplify and control the user environment.
- * Make the HPDESK interface available from other applications.

Foreign Service Connection

Further on in this paper when intrinsics are introduced, the foreign service connection will be discussed again however its worth providing an overview now.

The foreign service connection (FSC) can be used to pass information:

- from an application to users all over the HP DeskManager network
- to an application from users all over the HP DeskManager network
- from one application to another via HP DeskManager

In this context, "application" includes other foreign mailing systems (for example the Telex network or HP Office Connect to IBM Profs or Disoss) as well as HP3000 applications.

FSC uses the widely accepted ARPA file format for the transfer of data. This allows other applications to interpret what it sends.

Application Data Passing

HPDESKMANAGER

APPLICATION INTEGRATION

- * Application Area Menu
- * Access to Application Controlled by User Group
- * Pass Data Between Applications and HPDESK
- * Access to Programmatic Document Conversion
- * Access to HPLIBRARY
- * Forms Processing Capability
- * Access to HPDESK HELP Facility from the Application
- * Suspend from the Application to HPDESK

HP DeskManager allows you to integrate your own applications into HP DeskManager. Script Files which will be discussed later and abbreviations allow you to start and direct the running of your applications. However, once you have started up your application, it and HP DeskManager can pass information (files) between each other. This is what is meant by Application Data Passing.

Application Data Passing (sometimes known as the "Applications Umbrella") allows the user of an application program and the application program itself to gain some access to HP DeskManager. The application must always be run from within HP DeskManager, that is, as a SON process.

The user will be in the application most of the time and will occasionally suspend back into HP DeskManager, maybe to read new mail or retrieve a document before returning to the application once again.

The application can access some HP Desk items itself without the user becoming involved. It can also put new items into the HP DeskManager database without user intervention.

The sort of information which can be passed between the application and HP DeskManager includes:

- The identity of the items in the workarea which the applications wants and the name of the MPE file HP DeskManager has put it in.
- The name of the file which is to be passed to the library, and the name of the catalog it is to go in.
- Where HP DeskManager has put the forms batch file the application is to process.
- The help page which is to be displayed.

How Application Data Passing Works

The users starts the application from within HP DeskManager using either:

- the MPE command: RUN
- the EXECUTE command
- an installed abbreviation
- a script file

The application is run as a SON process of the HP DeskManager user interface program.

Once running the application has control of the user's session, in other words the user is in the application program.

The return to HP DeskManager can be made in one of two ways:

- The application (the SON process) can suspend to allow HP Desk (the FATHER process) to perform a task. Once the task is complete, the SON process is resumed, without having to be recreated.
- The SON process can be terminated by the father. Complete control is returned to HP DeskManager. If the user starts up the application again, the SON process has to be recreated.

Ways of suspending the Application

The application can be suspended using Interrupt modes. There are 16 different Interrupt Modes which can be used to suit the application's needs. They can be divided into two main areas, those which:

- Put users into HP DeskManager at the SUSPEND prompt. User's can then move around their desk as normal. They are returned to the application when they press the RESUME key.
- Leave users in the application so that they do not see the HP Desk user interface. In this situation, the application asked HP Desk for some information, or to perform a particular task, for example, display a HELP screen or pass an item to the WORKAREA.

The 16 application interrupt modes are:

HPDESKMANAGER

Application Interrupt Modes

- 1 Return to HPDESK In Suspend mode
- 2 Return a file to HPDESK
- 3 Copy an item from HPDESK
- 4 Return a file to the Work Area
- 5 Copy an item from the Work Area
- 6 Replace an item in the Work Area
- 7 Initialize Forms Processing
- 8 Get next forms data
- 9 Copy a file to HPLIBRARY
- 10 Document conversion
- 11 Help
- 12 Copy from current area item #
- 13 Copy from current area subject
- 14 Check for new mail
- 15 Execute MPE file as a script
- 16 Exit

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Application Data Passing Examples

Here are some application data passing examples:

1. Send VPRINTFORM File - When in a View based application, we can use the intrinsic VPRINTFORM to send an image of the current displayed view form to an MPE file. This file can then be passed to the users WorkArea and then sent on to other desk users with comments about the attached screen.
2. Controlled Environment - Using Logon UDC's with NOBREAK option and disable MPE for DESK users, we can create an environment where the user will never see an MPE prompt. Every action that the user needs can be done with a script file. Some DESK commands can be deactivated to insure the user cannot accidentally cause damage.
3. Help Page Access - Many applications are lacking in a structured help system. Applications running under HP Desk can now access HELP pages installed in HP Desk. This feature gives the appearance of tight integration and provides a simple solution for those applications where a HELP facility is required.

TASK AUTOMATION

Single user-defined commands for:

- * Automatic mailing and administration of scheduled reports.
- * Simplified execution of external applications.
- * Productivity improvements through automated user tasks.



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What are they?

A script file is a normal, named HP DeskManager text item containing a set of commands. When you execute a script, the commands held in it are carried out.

What set of commands can I use in Script Files?

The commands which can be included in scripts can be divided into four main types.

- Normal HP Desk commands, any command you would type while using HP DeskManager for example READ, SEND, LIST, PRINT, PROFILE.
- MPE commands, most MPE commands are allowed in scripts.
- Directives, which control the flow of the script and provide other "programming" type functions.
- Label lines, these allow conditional execution of parts of a script.

There is another feature of script files called active functions. They allow you to use the other types of command in a more sophisticated way providing arithmetic and logical functions.

SCRIPT FILES

- * DESK, SCHEDULE and FILE/LIBRARY Commands
- * MPE Commands - Can Run an External Application
- * Script File Command Language:
 - ~ Arithmetic, String and Logical Functions
 - ~ File and Data Item Handling
 - ~ User Response
 - ~ Parameter Substitution
- * Access Controlled by User Groups



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Script Files - Example

Here are some examples of what script files can be used for:

1. Personal maintenance function - A script that would scan your filing cabinet and move items that have been created before a certain date to another folder called Old Items. These can then be reviewed and deleted if need be.
2. Report Forwarding Scripts - This script would check to see if a report file exists in MPE, which was created by another JOB. The user would then have the option to send it out for distribution and file it in a Report History folder.
3. Dynamic Info String - Many utility programs and applications will accept info strings at run time. By using script files we can prompt the user for information then format that information into proper info string that can be executed.

Introducing HP DeskManager Intrinsics

History

As you have just read HP DeskManager offers extensive integration facilities, from script files through to application data passing. However, our customer base wanted more.

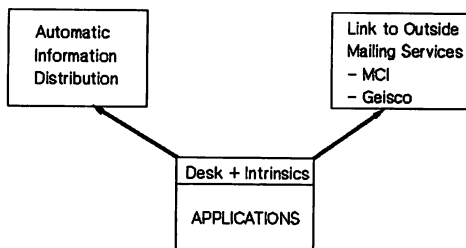
We conducted a survey last year of key accounts and value added businesses (VAB's) and it became clear that there was a need for a programmatic, or intrinsic interface to HP DeskManager.

As a result of this feedback we have developed the HP DeskManager Intrinsic - a new BOLT-ON product for HP DeskManager. (HP DeskManager is also required)

HP DeskManager Intrinsic at a glance

HP DeskManager Intrinsic allow an application to access in a simple way the mailing and other services of HP DeskManager from within that application. The application can automatically distribute information to HP DeskManager users. In addition users can have direct access to HP DeskManager WITHOUT leaving the application they are using at the time. Also applications connecting HP DeskManager to other mailsystems can be more functional and have better performance than is possible with the foreign service connection.

INTRODUCING HP DESKMANAGER INTRINSICS



- ★ Information Distribution from within your application
- ★ Linking Suppliers ↔ Manufacturers ↔ Customers

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Product Capabilities Indepth

The Intrinsic allow a user to access in a simple way the mailing, diary, directories an converters of HP DeskManager from within his own application programs.

The Intrinsic comprise of two types of access intrinsic with a third set of supporting intrinsic.

HP DESKMANAGER INTRINSICS PRODUCT OVERVIEW

- ★ User Intrinsic
 - Intrinsic access to HP DeskManager mailing and diary features
 - Allows application to sign on as an HP Desk User
 - Allows application integration from outside the HP Desk umbrella (application as father)
- ★ Gateway Intrinsic
 - Gateway to other mailing systems
 - Superior alternative to the foreign service connection
- ★ Support Intrinsic
 - Support for both "user" and "gateway" intrinsic
 - e.g. access to Word Processing Converters and the Directory

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User Intrinsic



HP DeskManager User

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These allow an application program to be able to log on as if it were an HP DeskManager user and send and receive messages on behalf of that user via HP DeskManager.

Usage of the User Intrinsic

The User Intrinsic will be used to distribute reports from the application programs to HP DeskManager users, or, conversely, allow HP DeskManager users to supply information to these application programs.

Users of the User Intrinsic are expected to have elementary or advanced applications programming experience and have an understanding of MPE (or MPE/XL) and the MPE file system. Some working experience of the HP DeskManager user interface and knowledge of the local HP DeskManager configuration is required. An understanding of HP DeskManager internals is not required.

User Intrinsic Available:

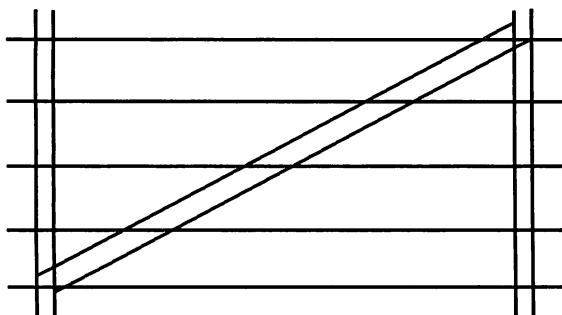
User Signon - allows application to sign onto HP DeskManager like a normal HP DeskManager user.

User Send - allows application to send one at a time, messages or replies to users on the HP DeskManager network.

User Receive - allows application to scroll through the messages in the user intray in sequence, returning both read and unread messages, or it allows the selective extraction of messages. This intrinsic may also be used to return messages in the user pending tray for tracking purposes.

Diary - allows applications to create items in the users diary, to list the contents of the users diary selectively and to extract or delete items selectively.

Gateway Intrinsiccs



HP DeskManager Gateway

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These allow a user application program to sign on to an HP DeskManager gateway and send or receive messages on behalf of any user associated with that gateway.

Usage of the Gateway Intrinsiccs

The Gateway Intrinsiccs will be used to link mail systems to HP DeskManager instead of using the foreign service connection.

Users of the Gateway Intrinsiccs are expected to have advanced programming experience and are likely to have some knowledge of HP DeskManager configuration details and issues. In addition they will be familiar with the external applications which will be calling these intrinsiccs.

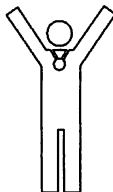
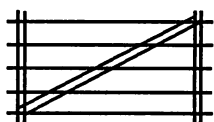
Gateway Intrinsiccs Available:

Gate Signon - allows application to sign on to an HP DeskManager gateway.

Gate Send - allows application to send messages, replies and acknowledgments to users on the HP DeskManager network on behalf of any user associated with the gateway.

Gate Receive - allows application to scroll through the messages, replies or acknowledgments deposited on the mail nodes associated with the gateway, returning urgent messages followed by normal th deferred messages.

Supporting Intrinsic



Supporting Intrinsic

These provide support for both the User and Gateway Intrinsic. Services which will be made available to users applications include:

- The ability to look up HP DeskManager directories for a given name.
- The ability to convert a document from one format to another.

Supporting Intrinsic Available:

DeleteMsg - allows application to delete the last message accessed by the User Receive or Gate Receive intrinsic

Name Probe - allows applications to search the HP DeskManager directories to verify one or more names, to extract or convert foreign address information and to extract lists or configured users.

Explain - returns a one line text message relating to the error code resulting from one of the other intrinsic calls.

Utility - allows listing of the intray or pending tray either in full or selectively, and conversion of documents from one format to another (given the converters available on the system).

Terminate - allows application to sign off as the HP DeskManager user.

When should I use scripts and application data passing and when should I use the HP DeskManager Intrinsic's?

Scripts should be used to automate repetitive tasks currently done manually within the HP DeskManager environment. Intrinsic's should be used to automate event driven activities within the application environment.

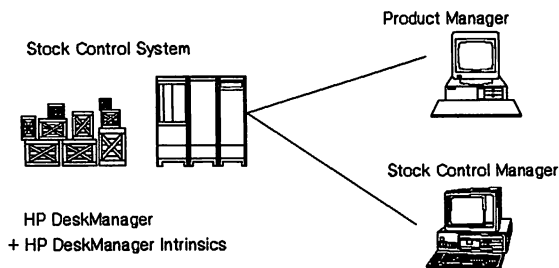
Application data passing should be used when the principal user interface is HP DeskManager. Intrinsic's should be used when HP DeskManager is not the principal user interface and where efficient distribution of information from within an application is required.

Scenario's

The following scenarios illustrate how HP DeskManager Intrinsic's have brought profit improvements to different organizations. We have assumed in each case that the organization already has HP DeskManager.

1. HP DESKMANAGER INTRINSICS COST JUSTIFICATION: MANUFACTURING

Scenario - Manufacturing The Need - Exception Reporting



COMPANY:

Company X - Manufacturing Division.

CONTACTS FOR MORE INFORMATION:

Bill Franklin, Central Office Marketing, Cupertino, 408-447-1156.
Peter Dunmore, Office Productivity Division, Pinewood, England.

BUSINESS PROBLEM:

Stock control clerks waste valuable time reproducing and distributing stock control reports. Valuable production time can be lost because the decision makers in a manufacturing division do not learn about adverse stock levels in a timely fashion. As a result overtime rates need to be paid to production workers to make up for lost production.

NEED DETERMINATION QUESTIONS:

High Level: Do you lose production time because of insufficient levels of stock?
If so how much does that cost per annum?

User Level: How much time does your stock control clerk spend reproducing and distributing stock control reports?
How much does it cost to produce these reports?

SOLUTION:

Integration of your Stock Control Application with HP DeskManager using HP DeskManager Intrinsic.

CUSTOMER SITUATION:

The stock control application generates four stock control reports each month. These reports have to be copied and distributed to, on average, ten people within the organization who need to act upon this information. It is the job of the stock control clerk to perform this function.

SAVINGS:

TOTAL ANNUAL COST SAVINGS FOR THIS COMPANY ARE \$23688 PER ANNUM. THIS GIVES AN ROI OF 42% AND THE INVESTMENT HAS A PAYBACK OF LESS THAN 29 MONTHS.

Every month the stock control clerk spends time collating, copying and distributing reports to key individuals in the organization. This costs on average \$154/month. These reports, generated by the manufacturing application, indicate shortages or excessive stock levels. This information is important to ensure

efficient stock management and to keep the production lines running. What the organization has found is that key information on stock levels has not been made available quickly enough for the necessary corrective action to be taken to prevent a loss in production. To make up for this loss in production, overtime rates have to be paid.

Using HP DeskManager and the HP DeskManager Intrinsic the exception reports are distributed automatically to those who need the information. As a result the organization has seen a 30% decrease in overtime manufacture. With overtime payments running at 10% of operating wages, ten workers effected and labor rates of \$35 /day, the organization has seen a cost displacement due to reduced overtime payments of \$1820 /month.

KEY ASSUMPTIONS:

Labor rate per hour for a Non-Professional (\$35.00)	_____
Labor rate per hour for a Professional (\$65.00)	_____

INVESTMENT:

27562A - HP DeskManager Intrinsic	\$0
27562A - Opt. 330 first copy for S/70 HP3000	\$9000.00
Three man months programming (65x8x90)	\$46800.00
TOTAL INVESTMENT	\$55800.00

WORKSHEET

- A. Labor savings to Stock Control clerks copying and distributing stock control reports as a result of the integration with HP DeskManager using HP DeskManager Intrinsic

Situation 1:

Number of reports produced per month (4)	x	_____
Number of copies to be made per month (10)	x	_____
Time spent copying each report (1 min)	x	_____
TOTAL time for preparing reports / month (40 mins)	=	_____
Labor rate for Clerk \$35 / hour (\$0.58/min)	x	_____
TOTAL cost for A (\$23.20/month)	=	_____

- B. Cost savings due to production and distribution costs of the stock control reports.

Situation 2: Production Costs

Number of reports produced per month (4)	x	_____
Number of copies to be made per month (10)	x	_____
Number of pages per report (10)	x	_____

Cost per page (0.02 x 1.714)	X	_____
TOTAL cost of producing report/month (\$13.7)	=	_____

Situation 3: Distribution Cost (local)

Number of reports produced per month (4)	X	_____
Number locally distributed (8)	X	_____
Time to distribute the reports (5 mins)	X	_____
Labor rate for Clerk \$35 / hour (\$0.58/min)	X	_____
TOTAL cost of local distribution/month (\$93.3)	=	_____

Situation 4: Distribution Cost (Fax)

Number of reports produced per month (4)	X	_____
Number faxed to destination (2)	X	_____
Cost to fax per report (1.7x1.714)	X	_____
TOTAL cost of faxing out reports/month (\$23.31)	=	_____

Total cost per month A+B (\$154)	=	_____
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C. Cost Displacement due to reduced overtime rates

Situation 5:

Decrease in overtime manufacture (30%)	X	_____
Overtime as a % of operating wages (10%)	X	_____
Number of production workers effected (10)	X	_____
Hours in day/Days in week/Weeks in year (8x5x52)	X	_____
Labor rate for Production Worker \$35 / hour	X	_____
TOTAL opportunity cost / month (\$1820)	=	_____

TOTAL cost displacement due to integration with HP DeskManager Intrinsics / month A+B+C (\$1974)	=	_____
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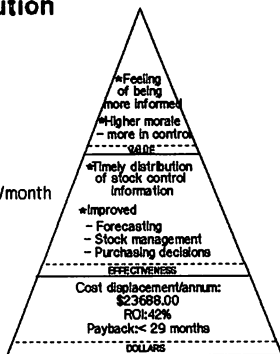
TOTAL cost displacement per annum (\$23688)	=	_____
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WORKSHEET SUMMARY

Total Cost Displacement Savings (\$23688)	_____
Return on Investment (23688/55800=42%)	_____
Time to Payback (Less than 29 months)	_____

Scenarios - Manufacturing The Solution

- ★ Investment
 - HP DeskManager Intrinsic
 - "A" copy \$9000
 - 3 man months programming \$46800
- ★ Cost Displacement
 - Stock control desks time/report
 - production and distribution costs \$154/month
 - Decrease in manufacturing overtime
 - \$1820/month
- ★ Effectiveness
 - Timely distribution of exception reports leads to minimum production loss due to stock shortages



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2. HP DESKMANAGER INTRINSICS COST JUSTIFICATION: MSS

COMPANY:

Company X - Marketing Sales and Service.

CONTACTS FOR MORE INFORMATION:

Bill Franklin, Central Office Marketing, Cupertino, 408-447-1156.
Peter Dunmore, Office Productivity Division, Pinewood, England.

BUSINESS PROBLEM:

The sales organization needs to be informed of the status of their customers orders on a very regular basis in order to ensure customer satisfaction. The supervisor of the order processing clerks needs to be able to more effectively manage the workload of his direct reports in order that they can cease to waste valuable time producing and distributing this information to the sales organization. The sales people spend a noticeable amount of their time attempting to find out the current status of their customers orders.

NEED DETERMINATION QUESTIONS:

High Level: Does your sales force need regular and automatically distributed information about their customers order

status?

User Level: How much time does your order processing clerk spend reproducing and distributing order status information?
How much does it cost to produce and distribute this information?
How much time do your sales force spend attempting to find out the current status of their customers orders?

SOLUTION:

Integration of your Sales Order Application with HP DeskManager using HP DeskManager Intrinsic.

CUSTOMER SITUATION:

ToDo lists are generated within HP DeskManager (using the Diary Intrinsic) and displayed within the Sales Order application. The supervisor automatically receives a consolidated ToDo list from all of the sales order clerks and can re-assign work where appropriate. In addition, information, such as acknowledgments, can be automatically sent out to the field and the factory so that they have the most up-to-date details on their customers order status. The current method involves the salesman, or whoever it is who needs the information, to ring the office and asking the sales order clerk for the information, who then spends time producing and distributing it.

SAVINGS:

TOTAL ANNUAL COST SAVINGS FOR THIS COMPANY ARE \$215200.80 PER ANNUM. THIS GIVES AN ROI OF 200% AND THE INVESTMENT HAS A PAYBACK PERIOD OF LESS THAN 6 MONTHS.

Each time an order is logged a series of events need to occur so order that the correct set of acknowledgments and confirmations are distributed to the customer, the field and the factory. It is the job of the sales order clerk to monitor the activities following an order being logged, and to relay this information to all the people concerned. The salesmen themselves need to know the current status of their customers orders to ensure that the order is progressing as it should and the customer remains a satisfied one. To obtain this information they make regular calls to the sales order clerk. It is estimated that they would regain 1% of their time to pursue more productive tasks if this process were automated and they received the information they needed automatically. This results in a cost displacement of \$17933.40 per month. It is estimated that the sales order clerk makes 2 calls per order per salesman, in order to find out the current order status. With the integration of HP DeskManager and the sales order application using the Intrinsic this function

happens automatically and results in a saving of \$1166.77 per month. The sales order clerk then has to produce and distribute the information which takes on average 3 minutes per order per salesman. Here a saving of \$1166.77 per month is made because the sales order clerk is now free to perform other tasks.

In total, a saving of \$17933.40 per month is made, due to the integration of the sales order application with HP Deskmanager using HP DeskManager Intrinsics.

KEY ASSUMPTIONS:

Labor rate per hour for a Non-Professional (\$35.00)	_____
Labor rate per hour for a Professional (\$65.00)	_____
Number of Salesmen (100)	_____
Average number of orders/salesman/month (10)	_____
Average size of order (\$4000.00)	_____

INVESTMENT:

27562A - HP DeskManager Intrinsics	\$0
27562A - Opt. 320 first copy for S/37 HP3000	\$5000.00
27562R - Opt. 320 right to copy for S/37 (2)	\$8500.00
Six man months programming (6x30x65x8)	\$93600.00

TOTAL INVESTMENT	\$107100.00
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WORKSHEET

A. Labor savings to Order Processing clerks.

Situation 1: Personnel cost in ringing the factory for information:

Average number of orders per month (10)	x	_____
Number of Salesmen (100)	x	_____
Average number of calls to factory/order (2)	x	_____
Average length of call (1 min)	x	_____
TOTAL time for calls to factory / month (2000 mins)	=	_____
Labor rate for Clerk \$35 / hour (\$0.58/min)	x	_____
TOTAL cost for situation 1 (\$1166.67/month)	=	_____

Situation 2: Personnel cost in producing and distributing the information to the salesmen.

Average number of orders per month (10)	x	_____
Number of Salesmen (100)	x	_____
Average time to produce information/order (2 mins)	x	_____
Average time to distribute information/order (1 min)	x	_____
TOTAL time to produce/distr. / month (2000 mins)	=	_____
Labor rate for Clerk \$35 / hour (\$0.58/min)	x	_____
TOTAL cost for situation 2 (\$1166.67/month)	=	_____

TOTAL costs for A (\$2333.34)

= _____

B. Labor savings due to the sales force having more time to focus on productive tasks.

Situation 3:

% of time saved per annum (1%)

x _____

Number of Salesmen (100)

x _____

Labor rate for Sales Profess./annum (65x8x30x12)

x _____

Number of months in the year (12)

/ _____

TOTAL savings / month (\$15600.00)

= _____

TOTAL cost displacement due to integration with HP DeskManager
Intrinsics / month A+B (\$17933.32)

= _____

TOTAL cost displacement per annum (\$215200.08)

= _____

WORKSHEET SUMMARY

Total Cost Displacement Savings (\$215200.80)

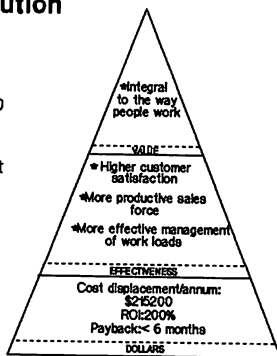
Return on Investment (215200/107100=201%)

Time to Payback (Less than 6 months)

2. Marketing, Sales and Service

Scenarios - Marketing, Sales and Service The Solution

- ★ Investment
 - HP DeskManager Intrinsics
 - "A" copy and 2 "R" copies \$13500
 - 6 man months programming \$93600
- ★ Cost Displacement
 - Order Processing Clerks time/report production and distribution costs \$2333/month
 - Salesmans time \$15600/month
- ★ Effectiveness
 - Greater customer satisfaction



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3. HP DESKMANAGER INTRINSICS COST JUSTIFICATION: GATEWAY INTRINSICS

COMPANY:

Company X - Link to a Proprietary Mailing System

CONTACTS FOR MORE INFORMATION:

Bill Franklin, Central Office Marketing, Cupertino, 408-447-1156.
Peter Dunmore, Office Productivity Division, Pinewood, England.

BUSINESS PROBLEM:

The organization needs to have an efficient, high functionality link between HP DeskManager and it's own proprietary mailing system.

NEED DETERMINATION QUESTIONS:

High Level: Do you have your own proprietary mail system and HP DeskManager running side by side with no link between the two?

User Level: Have you considered making this link using the Foreign Service Connection available within HP DeskManager?

SOLUTION:

Use the GATEWAY HP DeskManager Intrinsics as a means to integrate HP DeskManager with your Proprietary mailing system. Using the Gateway Intrinsics provides improved performance (approximately 30%), greater functionality (e.g. two way acknowledgments), and easier administration in comparison with the Foreign Service Connection.

SAVINGS:

TOTAL ANNUAL COST SAVINGS FOR THIS COMPANY ARE \$46800.00 PER ANNUM. THIS GIVES AN ROI OF 936% AND THE INVESTMENT HAS A PAYBACK PERIOD OF LESS THAN 2 MONTHS.

KEY ASSUMPTIONS:

Labor rate per hour for a Professional (\$65.00) _____

INVESTMENT:

27562A - HP DeskManager Intrinsics	\$0
27562A - Opt. 320 first copy for S/37 HP3000	\$5000.00

TOTAL INVESTMENT

\$5000.00

WORKSHEET

A. Programming time to link HP DeskManager to the proprietary mailing system versus the Foreign Service Connection:

12 man months programming using FSC
(12monthsx30daysx8hoursx\$65/hour=\$187200.00)
9 man months programming using HP DeskManager Gateway _____
Intrinsics (9mthsx30daysx8hoursx\$65/hour=\$140400.00) - _____
Saving due to use of Intrinsics (\$46800.00) = _____

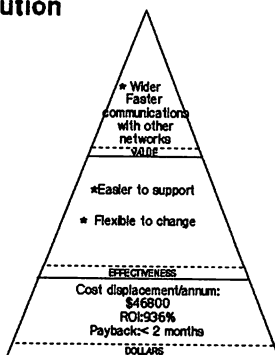
TOTAL cost displacement due to integration with HP DeskManager
Gateway Intrinsics (\$46800.00) = _____

WORKSHEET SUMMARY

Total Cost Savings (\$46800.00) _____
Return on Investment (\$46800/\$5000=936%) _____
Time to Payback (Less than 2 months) _____

Scenarios: Gateway Intrinsics The Solution

- ★ Investment
 - HP DeskManager Intrinsics
 - "A" copy \$5000
- ★ Cost Displacement
 - 25% less programming time
 - (ie. 3 man months) \$46800
- ★ Effectiveness
 - Faster communication with other networks with a product which is easier to support and change



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Conclusion

This paper talked about the integration features available with HP DeskManager.

The paper introduced HP DeskManager Intrinsic (a new BOLT-ON product to HP DeskManager) and showed via examples how organizations could gain profit improvements from using the product to integrate HP DeskManager with other applications.

HP DESKMANAGER INTRINSICS Summary

- ★ Information Distribution provides proven profit
- ★ HP DeskManager Intrinsic provides Information Distribution from within your application
- ★ CPL - 3rd Qtr 1988
- ★ Availability - 3rd Qtr 1988
- ★ Pricing - \$2000 to \$11000 depending on processor

