



Migrating To *Wise*

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Table of Contents

Introduction.....	3
Making an <i>Wise</i> Choice.....	3
Windows and Web Access.....	3
Managed Service Provider (MSP).....	3
Staffing Requirements.....	4
Conversion Considerations.....	4
Replace existing applications with the iWise Application Suite.....	4
iWise Integrated Application Suite.....	4
Maintain some or all of the existing applications integrated with those on iWise.....	5
Migrating to iWise From Other Service Management Tools.....	6
Interfaces to External Products.....	7
Data Conversion.....	7
Understanding the Current Environment.....	9
Applications.....	9
Interfaces.....	9
Userexits.....	9
Reports.....	10
Preparing for the Migration.....	11
Server Requirements.....	11
Installing the ODBC-Supported Database.....	11
Installing the Proper Software Service Packs.....	12
Testing.....	13
System Administrator Testing.....	13
Testing the Applications.....	13
Parallel Testing.....	14
User Acceptance Testing.....	14
Training.....	15
Support Staff Training.....	15
User Training.....	15
Administrator Training.....	15
Performing the Migration.....	16
Appendix A - Installation Requirements for iWise.....	17
Appendix B - iWise Architecture.....	18
Appendix C – Tool/Application Worksheet.....	19
Appendix D – Interface Worksheet.....	20
Appendix E – Userexit Worksheet.....	21
Appendix F – Report Worksheet.....	22
Appendix G – Staffing Requirements.....	23

Introduction

Planning a change to your service management software is a major undertaking requiring a good migration strategy. This paper will assist you in your planning by providing strategy guidelines that have been employed through many conversions. Worksheets are provided in the appendixes of this document to assist you in your planning.

If, at any time, you have questions or would like infraWise to assist you in planning your strategy please don't hesitate to contact us at any of the following:

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Making an iWise Choice

This paper will address all of the factors to be considered when transitioning from one or more tools to iWise. Depending on your situation, there are documents that will provide additional information that may be useful to your planning and decision process. Please contact your infraWise sales representative for copies of these documents or go to our Web site – <http://www.infrawise.com/downloads.php> to obtain copies in Adobe PDF format.

Windows and Web Access

In planning your migration strategy, you must determine which of your current and planned future users will access the applications from the Windows desktop or via a Web browser. Once your previous tool applications are replaced, the iWise Solution will allow you the choice of user interface. The Windows client is typically used by analysts who interact constantly with iWise, such as Service Desk agents. The iWise Web Client will allow similar functionality but through a browser interface. Refer to *Appendix B - iWise Architecture* for a description of how iWise is designed to support all of the various access methods.

Managed Service Provider (MSP)

InfraWise can provide a hosting service for your applications that relieves the burden of supporting the hardware and software environments by your company. If you choose this service, infraWise will be responsible for all of the initial and on-going hardware and software installation and maintenance.

If you would like to learn more about a potential iWise MSP solution, please contact your infraWise sales representative.

Staffing Requirements

Migrating service management applications to another solution is a complex task involving varying levels of staff involvement. See *Appendix G – Staffing Requirements* for a list of potential staff and skill sets that may be required.

Conversion Considerations

The iWise application suite has been designed to use any industry standard SQL/ODBC compliant database installed on any platform.

The specific hardware and software requirements for an iWise implementation may be found in *Appendix A - Installation Requirements for iWise*.

The table below shows the tested and supported databases for the iWise environment:

iWise Distributed
Sybase
Oracle
MS SQL Server
DB2/UDB

Once you have selected the database technology and platform, your next consideration is that of the application, interfaces and data migration. For applications, infraWise provides the following options:

- Replace the existing applications with the iWise Application Suite
- Maintain some or all of the existing applications integrated with those on iWise

Replace existing applications with the iWise Application Suite

This option provides the capability to replace all of your existing Enterprise and Systems Management applications that are based on various tools, with the iWise Application Suite. The iWise application suite is an ITIL compliant integrated set of applications comprised of the following management disciplines:

iWise Integrated Application Suite

<u>Process Management</u>	<u>Support Management</u>
----------------------------------	----------------------------------

Incident Management	Policy Management
Problem Management	Service Catalog
Change Management	CMDB (Configuration Management)
Request Management	Knowledge Base
Asset Management	Service Level Agreements (SLA)
Enterprise Release Management	Automation Policies
Human Resource Administration	
Customer Relationship Management	

The iWise applications can be further tailored to include functions that your existing applications may contain that are not part of the standard iWise suite.

The major area of work to be considered with this option is that of the migration of your existing application record types into corresponding iWise formats. To support all of the applications integration and functionality, iWise uses a significant number of attributes (data fields) that may not have an equivalent in your existing applications. This issue should receive special consideration.

iWise validates all data fields, thus preventing inconsistencies in the database. Unless your current tools and systems have always enforced strict validation guidelines, your existing database(s) may contain a variety of entries for a given attribute that may or may not be accepted today. For example, some records may contain phone numbers or location codes which are no longer valid.

Making the transition involves the following:

- Determining if iWise has matching applications to the existing tool set and if gaps exist.
- Determining if all of the business functions in the existing applications can be provided within iWise or if additional functions will be required.
- Determining if the external interfaces should be converted to work with iWise and if so, whether a rewrite to current interface languages (XML, REXX, etc.) will be required or desirable from a support perspective.
- Providing data mappings of the existing application record types (i.e., problem, change, request, etc.) to the equivalent iWise types.
- Determining the termination requirements of any license agreements with other vendor(s) and the potential impact on project dates.

Maintain some or all of the existing applications integrated with those on iWise

You may choose to retain some or all of your existing tool applications, while migrating others to the iWise distributed architecture. Retaining the other tools may require annual maintenance payments for two or more software products, when only iWise may be sufficient. In some cases, license issues and associated costs may dictate that retaining some portion of existing tools is the most cost effective solution.

Determining What Applications and Functions Can Be Converted

The next step, once the decision is made to convert all or some of the applications, is to determine exactly which applications on each tool should be converted. In addition to the obvious visible portion of each application, the following non-visible related application functions/processes are also part of the migration plan:

- Service Level agreements
- Support rules (approvals, escalation, assignment, etc.)
- Outage calculations
- Relational lookups
- Interfaces to external products
- Object creation from existing objects
- Attribute validations
- Object ownership
- Application authorizations

Your applications may have specific functions and interfaces that are not matched within the iWise architecture. In these rare circumstances, infraWise will make suggestions on how other available functions may be substituted.

Migrating to iWise From Other Service Management Tools

If you have decided to evaluate the possibility of replacing your current service management tools, your reasons may vary, but likely some of the following points have caused you to consider an alternative:

- You would like to combine multiple service management tools into a single solution
- Your current service management tool/application no longer meets your requirements
- You would like to offload mainframe processing to a Windows/Web based end-user access environment
- Business application standardization requires that all applications must be accessible from the Web.
- You are merging multiple helpdesks
- You need to replace older, non-integrated solutions with an ITIL compliant integrated solution set

For whatever reason, migrating from your existing environment to iWise involves many processes and occurs over a period of time. You must decide if you want to make an immediate cutover or transition to iWise in a phased approach. If you transition incrementally you will need to run iWise parallel with your existing tools/application(s), and possibly share some data during the transition process.

Interfaces to External Products

Your Tool applications may have interfaces to these commonly used tools:

- NetView
- Rational
- HP OpenView
- CA Unicenter
- Tivoli Enterprise Console (TEC)
- Microsoft SMS
- BMC Patrol
- Microsoft Office
- Others

During a migration to iWise, these interfaces may also need to be converted.

For mainframe interfaces, iWise Host Middleware provides the interface point between the iWise Client/Server and the mainframe applications. The iWise Host Middleware provides the iWise Object Interface Adapter (OIA) that allows you to convert your existing interfaces to the iWise OIA structure. OIAs are coded in open source REXX.

An interface with any network accessible application requires that the target application have an open API or offers a standard interface such as XML. A worksheet that assists you in describing your interfaces is provided later in this paper.

Data Conversion

Migrating from any tool to the iWise solution involves transferring the data from your existing application(s) to iWise. The following are the primary tasks associated with any migration of application data.

External Data Mappings

Every application, including iWise, has its own unique set of objects and attributes. Mapping the external application data to corresponding attributes in iWise is a critical task. You may not find a one-to-one attribute relationship between other service management applications and the iWise data model.

In addition to the objects and attributes that make up each application, you should consider the following related data items for each tool application record type (i.e. Change, Problem, Asset, etc.):

- Journal/audit (history) data
- Free form text
- Date formats
- Field validations

External Data Extractions

The conversion tasks are simplified if your current service management applications offer data export facilities, such as an export to an external file of data for each object type, an ODBC or XML interface.

External Data Extraction Clean-up

In many cases iWise validates data as it is entered or updated. infraWise has found that many systems and tools **do not** enforce data validation, thus allowing data inconsistencies to occur.

Considerable time may be spent manipulating the data extracted from other applications. iWise contains a number of *required* attributes that may not have an equivalent value in the external source; iWise permits you to provide defaults for these attributes. You may then use the iWise Mass Update facility to alter the contents of these attributes from the specified default values to more appropriate choices.

Conversion Routines

Once you have cleaned up the external data sources, you may then update the data load OIAs (Object Interface Adapters) supplied with the iWise Knowledge Base. OIAs are open source REXX-based utilities that allow you to create, update, or delete object data in the iWise database. Over 70 pre-defined OIAs are shipped with the iWise product.

Loading Test Data

A sample extraction file should be the first file that you convert. This allows you to debug any errors in the REXX OIAs and verify that data mappings are correct. Once you have proven the external data and corresponding REXX OIAs are correct you can proceed with a full data load.

Understanding the Current Environment

The migration team must understand all aspects of the structure surrounding your applications, including:

- Applications
- Interfaces
- Userexits
- Reports

Applications

If you have applications that were developed in-house, the migration will require a similar application in iWise.

Please use the worksheet provided in *Appendix C - Tool/Application Worksheet* to describe the application. You may copy as needed.

Interfaces

What interfaces to external products have been developed with your existing service management tools? If an interface must be converted, infraWise must perform an evaluation of the existing interface and the functions it performs. Once the evaluation is complete, infraWise can provide a cost and time estimate for the conversion activity. Without this evaluation, infraWise cannot determine whether the existing interface can be ported to work with the iWise architecture, or if it must be completely rewritten.

Please use the worksheet provided in *Appendix D – Interface Worksheet* to describe the function performed by each interface.

Userexits

Are you using vendor-supplied exits or have you developed them in-house?

If you have developed any userexits, infraWise must evaluate them to see if any existing iWise exits can perform the same function or produce the same result.

Please use the worksheet provided in *Appendix E – Userexit Worksheet* to describe the function performed by each exit.

Reports

Your existing reports will also be considered in the migration; all reports may need to be replicated in the iWise application.

Please use the worksheet provided in *Appendix F - Report Worksheet* to describe each report.

Preparing for the Migration

Server Requirements

Once you have chosen a migration path, you must determine your hardware needs. In its most extensive form, iWise requires the following:

- Database Server
- Transaction Server(s)
- Application Server(s) – (for Web access)
- Desktop Clients (Windows and Web browser access)
- Web Server (Java applet and HTML Help)
- Minor Space on a File Server (iWise executables)

Specific requirements may be found in Appendix A - Installation Requirements for iWise.

Installing the ODBC-Supported Database

If you are migrating from a proprietary database, you may need to install an SQL ODBC-compliant database. iWise requires an ODBC-supported database for storage of the data, visible panels, and business logic processing rules.

The following will help you determine your needs:

Do you want the database component to reside on a mainframe, Windows Server, or Unix server?	
What database do you want to use? <ul style="list-style-type: none">• Oracle• Sybase• MS SQL Server• DB/2• Other _____	
Number of Users? <ul style="list-style-type: none">• Concurrent• Casual• Total	

What is the user mix across geographic locations?	
---	--

Installing the Proper Software Service Packs

Before installing the iWise software (framework and applications), you must ensure that your operating and database environments are up-to-date with required maintenance or service packs. The *infraWise Installation Guide* documents the latest support and service pack levels required at the time of its publication.

Testing

Most migration strategies include parallel testing to ensure the new form of the application produces the same results as the previous version. The application data collection flows are not the only objects that must be tested; you must also ensure that reports and interfaces to other applications produce the same results.

System Administrator Testing

System administrators will be charged with maintaining the supporting functions of iWise. This includes:

- System administration
- Database administration
- Application administration

Testing the Applications

After your applications have been modified, a thorough test must be performed to ensure that all aspects of the application function the same way as expected. Testing involves the following:

- System startup
- Profile settings
- Navigating the application
- Every attribute and related HELP
- Drop-down lists
- Option selections
- Icon functions
- Reports
- User and system documentation
- Backup and recovery procedures
- System hardware maintenance procedures
- Load and stress testing

Parallel Testing

- Comparing the results
- What to do when results do not match

User Acceptance Testing

After you have migrate each of your applications, we recommend that you turn them over to the user community to perform user acceptance testing. Although the applications should perform the same functions, there may be behavioral differences due to possible platform or operating system changes.

Training

Training is a critical step in the migration process. Training accomplishes two things – (1) user familiarity and (2) actual application testing before the transition to production. Both are of equal importance. Users who are familiar with the application’s new look and feel will easily make the transition to production if they are comfortable with the applications **before** the transition. System administrators will also more readily accept the new system once they are familiar with the administrator responsibilities and have had a chance to exercise those duties.

Support Staff Training

Items in the Staffing Requirements (*see Appendix G – Staffing Requirements*) list may require additional education for your staff. Because of the complexity of many of the requirements, it is unlikely that any one person can provide the proper level of expertise.

User Training

After you convert your applications from your existing tools to iWise, some user re-training is required. Although the applications may behave similarly, there will be differences in their presentation and navigation methods.

Administrator Training

For companies making the transition from other tools to iWise, your existing system and application administrators will require additional training in the functions and methods of the iWise architecture.

Performing the Migration

The final step in the migration path is the actual transition to production. With careful planning, adequate testing and training, this step should be painless.

The final preparation steps are:

- Back up everything associated with the applications in both environments
- Run any necessary data conversions for the database
- Rebuild and refresh all tables and summary objects
- Activate the system activity monitors

Appendix A - Installation Requirements for iWise



NOTE: Before you install new software on a computer, it is always a good idea to consult your operating system's instructions and backup critical data.

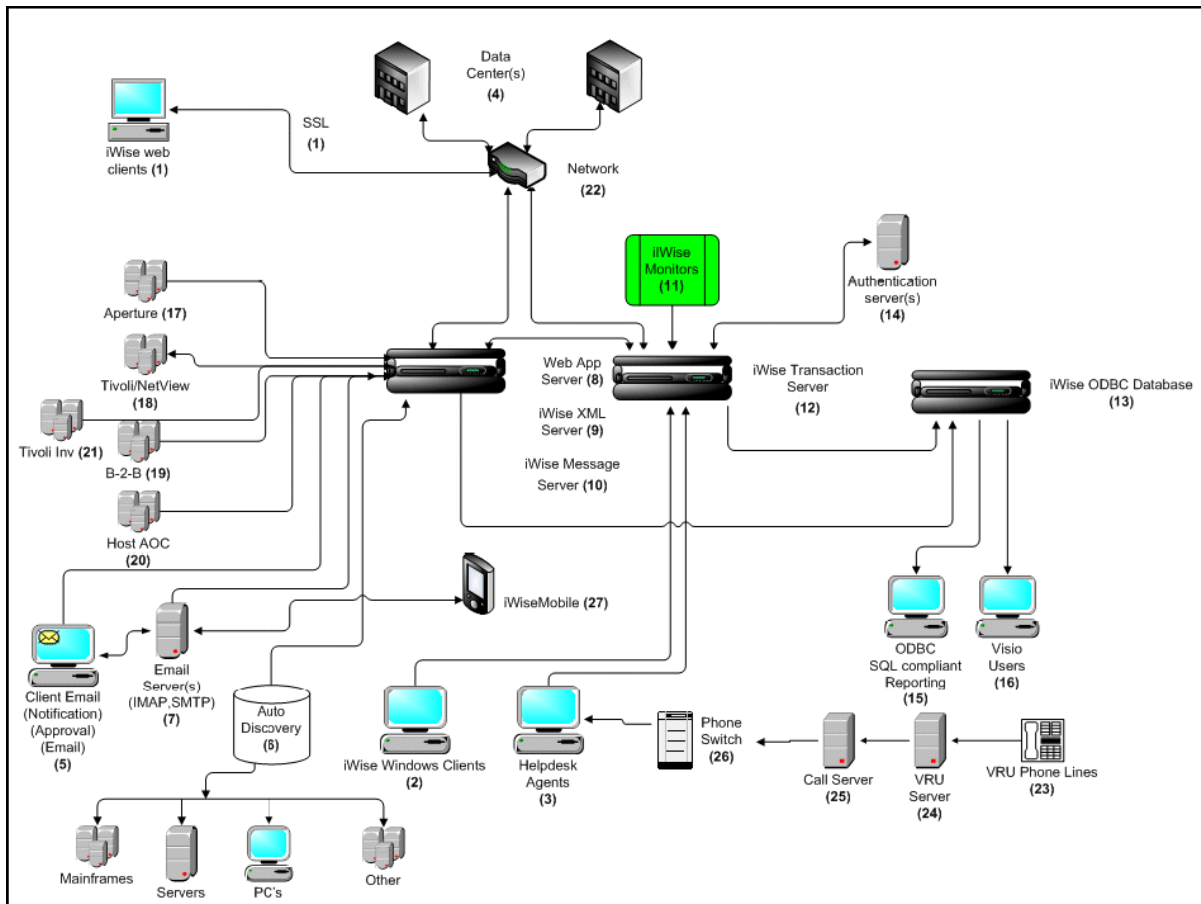
For all of the following requirements, please refer to http://www.infrawise.com/prd_rqmnts.php

- [Hardware Requirements for the Transaction Server](#)
- [Software Requirements for the Transaction Server](#)
- [Hardware Requirements for the Client](#)
- [Software Requirements for the Client](#)
- [Software Requirements for the Web Client](#)
- [Hardware Requirements for the iWise XML Server](#)
- [Software Requirements for the iWise XML Server](#)
- [Hardware Requirements for the Web Application Server](#)
- [Software Requirements for the Web Application Server](#)
- [Requirements for iWise Help](#)
- [Requirements for Reports](#)
- [Database Requirements](#)

Appendix B - iWise Architecture

The following diagram and associated description illustrate the robustness of the iWise Enterprise Solutions' multi-platform architecture. Consisting of a suite of ITIL-compliant disciplines, the iWise solutions offer organizations a unique, life-cycle approach to IT Service Management. The infraWise methodology focuses on automating and streamlining service and support processes to improve efficiency and reduce costs.

Throughout the world, organizations large and small use the iWise applications and centralized repository to address ITSM Service Support and Service Delivery requirements. The intent of the diagram and descriptions below is to demonstrate the scalability, openness, and security features inherent in the iWise data model, and to point out the user-friendly interface options, flexible reporting capabilities, and ease of integration with third-party solutions that iWise offers.



Please refer to this PDF link for an explanation and description of each numbered item in the architecture - http://www.infrawise.com/download/iWise_EMS_Architecture_Overview.pdf.

Appendix C – Tool/Application Worksheet

Tool Name: _____

Main Function: _____

Application/usage details:

Application A: _____ # of Users: _____ Contact name/Ph: _____

Application B: _____ # of Users: _____ Contact name/Ph: _____

Application C: _____ # of Users: _____ Contact name/Ph: _____

Application D: _____ # of Users: _____ Contact name/Ph: _____

Application E: _____ # of Users: _____ Contact name/Ph: _____

Database technology used: Name: _____ Version: _____

External Validation Tables used if any:

Notes: _____

Appendix D – Interface Worksheet

Interface Name: _____

Interface Function: _____

Is the source code available? **Y / N** If yes, source location: _____

Interface format or language: XML – **Y / N** , Email - **Y / N** , API - **Y / N** , Other - _____

System ID: _____

Execution frequency: _____

Execution Interval: _____

Exceptions: _____

How to restart if interface fails: _____

Message to issue when interface fails: _____

Is an Incident record generated if the interface fails? **Y / N** Model ID: _____

Contact person: _____ Phone: _____

Notes: _____



Appendix E – Userexit Worksheet

Userexit Name: _____

Userexit Function: _____

System ID: _____

Is the source code available? **Y / N** If yes, source location: _____

Equivalent iWise exit or TSU if known: _____

Message to issue when Userexit fails: _____

Is an Incident record generated if the Userexit fails? **Y / N** Model ID used: _____

Contact person: _____ Phone: _____

Notes: _____



Appendix F – Report Worksheet

Report Name: _____

Report Function: _____

Is the source code available? **Y / N** If yes, source location: _____

Execution frequency: _____

Execution Interval: _____

Exceptions: _____

System ID: _____

How to restart if Report fails: _____

Message to issue when Report fails: _____

Is an Incident record generated if the Report fails? **Y / N** Model ID: _____

Contact person: _____ Phone: _____

Notes: _____



Appendix G – Staffing Requirements

Skill Set	Name(s)
Windows Server network administrator	
Database Administrator for your choice of any SQL ODBC-supported database	
Programmer or administrator for knowledge of current tool/application	
Application development (logic flows, panel design, human factors, etc.) for any required application modifications	
System and application testers	
Reports Analyst - Crystal Reports (or any other SQL reporting tool)	
REXX coding (for the iWise Monitors)	
Java Script coding (just basic skills required)	
HTML coding (just basic skills required)	
Client/Server hardware support	
Application Administrator	
iWise system Administrator	
Operations Analyst for interface(s) knowledge	