FUJ00232449

Document title: **CS Support Services Operations Manual**

Document type: Operations Manual

Release: N/A

Abstract: This is the top-level procedures document describing the activities carried out by the Support Services Unit within ICL Pathway Customer Service

Document status: APPROVED

Owner: Peter Burden

Author & Dept: Richard Burton, A&TC, Technical Authors
Peter Burden

Contributors:

Reviewed by:

Comments by:

Comments to: Peter Burden

Distribution: Customer Service Director
CS Operations Services Manager
CS Support Services Manager
CS Infrastructure Services Manager
Pathway document library
SSC Manager
OTT Manager

FUJ00232449

0.0 Document Control

0.1 Document History

Any hardcopy of this document is **NOT UNDER CHANGE CONTROL** unless otherwise stated.

Version No.	Date	Reason for Issue	Associated CP/PinICL No.
0.1	25/9/00	First draft for internal CS review	
0.2	17/10/00	Draft for comment within Support Services	
0.3	03/11/00	Updated in line with comments from within Support Services	
1.0	07/11/00	Approved version	

0.2 Approval Authorities

Name	Position	Signature	Date
Peter Burden	Support Services Manager		

0.3 Associated Documents

The version numbers and dates the following table shows are those that were current when this document was written. If you wish to look at one of these referenced documents, search for the document in the Pathway Document Library (PVCS) and refer to the latest version.

Reference	Version	Date	Title	Source
CS/QMS/001			CS Policy Manual	ICL Pathway CS
CS/QMS/002	0.1		CS Process Manual	ICL Pathway CS
CS/QMS/005	1.0	8/11/00	CS Operations Services Operations Manual	ICL Pathway CS
CS/QMS/006	1.0	8/11/00	CS Infrastructure Services Operations Manual	ICL Pathway CS
CS/PRD/074	1.0		ICL Pathway CS Incident Management Process	ICL Pathway CS
CS/FSP/006	1.0	10/10/99	End-to-End Support Process Operational Level	ICL Pathway CS

FUJ00232449

			Agreement	
CS/PRD/021	3.0		ICL Pathway Problem Management Process Definition	ICL Pathway CS
CS/PRO/100	2.0	23/02/00	Routing of Software Code Fixes	ICL Pathway CS
CS/PRO/102	2.0	23/02/00	Daily and Weekly Procedures for the Release Management team	ICL Pathway CS

0.4 Abbreviations/Definitions

Abbreviation	Definition
BRT	Business Recovery Team
CMT	Crisis Management Team
CS	Customer Service
CSRM	Customer Service Release Manager
KEL	Known Error Log
HSH	Horizon System Helpdesk
OCR	Operational Correction Request
OSD	Operational Services Division (of ICL)
OTI	Open Teleservice Interface
OTT	Operational Test Team
RM	Release Management
SSC	System Support Centre
SMC	System Management Centre

0.5 Changes in this Version

Version	Changes
0.1	First draft for internal CS review
0.2	Minor updates prior to comment from within Support Services
0.3	Minor updates, particularly in the OTT section
1.0	Approved version

FUJ00232449

0.6 Changes Expected

Changes
Changes as a result of the annual review of this document

FUJ00232449

0.7 Table of Contents

FUJ00232449

FUJ00232449

1 Introduction

This manual provides a high-level description of the activities of the Support Services Unit within Pathway Customer Service.

2 Scope

This manual primarily provides a description of the operations of the CS Support Services Unit. However, to put these operations in context, it also describes some of the activities of other units where they are relevant. This is particularly the case in the software release management area. There are other manuals that describe operations within the other areas of Pathway Customer Service.

Where necessary, in addition to this manual, there are process documents, lower-level procedures and work instructions that describe some of the operations in more detail.

Appendix A, at the end of the manual, contains diagrams of some of the processes.

FUJ00232449

3 Overview

The purpose of the CS Support Services Unit is to support Pathway Customer Service in the day-to-day delivery of the Pathway solution. The prime operational units are:

- **System Support Centre (SSC)**
  Responsible for all support activities, and, in particular, it provides third line support for all applications in the Pathway estate
- **Operational Test Team (OTT)**
  Tests all software fixes and, where applicable, changes to reference data to ensure there is no risk to the live service
- **Release Management (RM)**

  Responsible for the release of software changes to the live estate

4 System Support Centre

This section of the manual describes the operations and responsibilities of the System Support Centre (SSC).

4.1 Overview

The principles by which the SSC operates are documented in *End-to-End Support Process Operational Level Agreement (CS/FSP/006)* which defines the responsibilities of the four levels of support towards each other. This document is effectively a service level agreement between the support units, outlining specific tasks and measures of success.

The aim of the SSC is to provide a support capability to Pathway that resolves technical problems in the minimum time and with the minimum amount of disruption to the service. The SSC aims to provide a centre of technical expertise for Customer Service, providing technical advice, guidance, and expertise relating to all parts of the Pathway system.

More specifically the SSC has responsibilities to:

- First and second line support
- Fourth line support

4.1.1 SSC responsibilities to first and second line support

The responsibilities of the SSC to first and second line support, that is the Horizon System Helpdesk (HSH) and the System Management Centre (SMC) respectively, are to:

1. Receive incidents passed from the HSH and SMC
2. Ensure that any incidents received are maintained on the call management system. When updates are made to the calls that are relevant to the HSH or SMC, the SSC ensures that these updates reach the Powerhelp system

FUJ00232449

3. Ensure that the reported incident is resolved correctly and the solution is recorded on the PinICL system
4. Ensure that the incident and solution are passed back to the HSH and SMC call management system. The solution includes a full explanation for the problem and the action taken to resolve it
5. Ensure that the incident is resolved within the total time allowed by the contract between the customer and Pathway
6. Ensure that the HSH and SMC are made aware of the evidence requirements for any form of incident and that this documentation is fully maintained
7. Create and maintain a register of known deficiencies within the Pathway system and the solution to these problems, where known
8. Allow the HSH and SMC access to this register so that they can fulfil their function of filtering out known errors
9. Ensure that any solutions or workarounds they pass to the SMC have been tested and have been correctly authorised via the software release management process
10. Ensure that the HSH and SMC are supplied with documentation relating to new releases of software in sufficient time to enable their staff to become familiar with the product prior to its release
11. Ensure that, for any incident which has been solved and passed back to the Powerhelp system, the customer has been contacted and made aware of the call closure
12. Hold workshops and skills transfer sessions relating to technical aspects of the Pathway system and diagnostic techniques
13. Ensure that the following figures are available to the HSH and SMC on demand:
    (a) Number of calls by priority currently outstanding with the SSC
    (b) Number of calls where resolution has been deferred to the next release
    (c) Number of calls by age currently outstanding with the SSC or fourth line support unit

4.1.2 SSC responsibilities to fourth line support

The responsibilities of the SSC to fourth line support are to:

1. Log all calls on a call management system
2. Filter out all calls for which the problem is already known to the support community and for which a solution is already known or has been generated. This includes problems for which the SSC knows a resolution but has not yet incorporated the resolution into the known error log
3. Retain duplicate incidents in the PinICL systems and ensure that when the resolved incident is received by the SSC the duplicated calls are closed.

FUJ00232449

Duplicate incidents are repetitions of an incident that has already been passed to fourth line support.

4. Ensure that the correct evidence for any problem is collected prior to the incident being passed to fourth line support for investigation.
5. Ensure that any incident that requires investigation by fourth line support is assigned to the correct PinICL team depending upon the specific product in which the incident has occurred
6. Ensure that any updates made to incidents passed to the SSC are sent to the fourth line support units
7. Ensure that any calls passed to fourth line support units are passed in a timely manner. The timing varies depending on the priority of a call
8. Ensure that the priority of any incident is assessed and recorded correctly
9. Filter out all calls for which the problem is not one of the following:
   (a) Software error
   (b) Documentation error
10. Ensure that for any incident passed to fourth line support the exact area of the problem has been identified and, wherever possible, a workaround has already been produced
11. Ensure that, for any code error, a probable solution is indicated prior to passing the incident to fourth line support and, wherever possible, the proposed solution has undergone limited testing
12. Accept full responsibility for the product, including fourth line support, and for the production of any code required to resolve incidents, for areas of the Pathway system where the product has matured, that is, no further releases of the product are expected
13. Create and maintain a register of known deficiencies of the Pathway system and the solution to these problems, where known, and allow access to this register to fourth line units so that they can enter details of solutions created within their area

4.2 Applications support

Appendix A in this manual contains process diagrams showing the roles of the support units.

4.2.1 Role of first line support

The HSH run by OSD, provides first line support to Horizon system users. The helpdesk has its own procedures, *Horizon System Helpdesk Incident Procedures (DSP/PRO/HH/010)*. The HSH uses Powerhelp, an application supplied by Astea Inc, as its helpdesk system.

When the HSH receives a service call, its first task is to determine whether or not the call relates to a hardware or software problem. For hardware problems, it contacts OSD to schedule engineers and, if necessary, spare parts to resolve the problem. Hardware and networking issues should be

FUJ00232449

resolved through operational resilience or change control processes and should not be passed through to the SSC.

The HSH also does not pass requests for advice and guidance to the SSC that it can provide directly to the customer.

However, if it cannot resolve a call quickly, or if there is a possibility of a software problem, the Helpdesk transfers the call to the second line support team for further investigation.

4.2.2 Role of second line support

The System Management Centre (SMC) is also run by OSD and provides second line support to Horizon system users. On receipt of a call from the HSH, the SMC's first task is to determine whether or not the service call is a software code problem.

The SMC also uses Powerhelp as its helpdesk system. The system has an Open Teleservice Interface (OTI) link to the SSC's call management system.

The HSH will have prioritised the call according to the criticality of the fault as follows:

Priority	Meaning	Notes
A	Business stopped	A post office that is wholly inoperative and unable to process any business
B	Business restricted	A post office that is restricted in its ability to transact business, for example, one counter inoperative
C	Non-critical	A post office that is working normally, but with a known incapacity, for example, an interim solution has been provided
D	Internal	An internal HSH/SMC problem, for example, a helpdesk PC or a telephone not working

SMC carry out any appropriate pre-authorised activities for resilience and recovery purposes as defined in their procedures. Both HSH and SMC have access to KELs (Known Error Logs) which contain authorised workarounds and repetitive manual action that they can implement.

If the service request call indicates a software problem which has been seen before, and for which a workaround is already available, the SMC follows its own internal procedures to ensure that the workaround is passed to the customer.

If the service request call indicates a software problem which has been seen before, and for which a workaround is not available, the SMC links the current call to the first call and does not pass the call to the SSC. This ensures that the SSC does not receive duplicate calls for the same problem.

If the service call indicates a software problem that has not been seen before, the SMC follows its own internal procedures to pass the call to the SSC, providing information about the problem and Pathway's exposure, that is, the

FUJ00232449

number of calls received and the potential number of counters that are affected. They also provide details about the software version installed on the platform.

4.2.3 Role of third line support

The System Support Centre (SSC) within Pathway Customer Service provides third line support for most applications.

The SSC uses PinICL as its call management system and diagnostic database. Calls from second line support are transferred from Powerhelp to PinICL via an OTI link, and updates to the PinICL calls are transferred back to second line support using the same mechanism.

When the SSC receives a call from second line support, second line support has already assessed the call as a software problem and flagged it with the appropriate priority. The SSC handles the call as follows:

1. The SSC checks details of known problems on the intranet site to determine whether or not the problem is similar or identical to a problem already known.
2. If the problem is known, the SSC carries out any pre-authorised actions that are available to it, for example, workarounds in the KEL
3. If the problem is not known, the SSC checks the diagnostic evidence and, if necessary, obtains further evidence from the live system to determine the nature of the fault.

   The SSC also uses its reference kit to recreate the symptoms reported by the customer and may then be able to obtain diagnostic data in a controlled fashion
4. If the problem is identified as a code fault, the SSC determines the area of code that has failed and, if possible, identifies a solution to the problem for fourth line support to implement. If possible, it tests the proposed solution before passing the call to fourth line support
5. If the problem is urgent, that is, a workaround has not been found, the SSC escalates the problem to fourth line support via PinICL. Note that any urgent corrective action is a one-off implementation of the solution to the problem.

   If the problem is not urgent, for example, a workaround has been implemented, the customer is satisfied and the support call has been cleared, the SSC still passes the problem to fourth line support via PinICL to generate a permanent fix. However, the SSC Manager may lower the priority of the PinICL to reflect the lack of urgency of the problem
6. If the problem is not identified as a code fault, the SSC identifies the exact nature of the fault and isolates the system that caused the symptoms. This may happen, for example, when the code is operating within specification but the customer reports symptoms which were not expected

FUJ00232449

7. Once the SSC has passed the call to fourth line support, it remains responsible for ensuring that the call is dealt with in a timely manner and for informing the SMC and HSH of any updates to the call
8. The SSC identifies the software that needs to be released permanently to the live environment as the long-term solution to the problem and notifies the CSRM accordingly

Note. Closing calls on PinICL and Powerhelp

- The SSC closes a call on PinICL when a resolution has been identified for the call and the details passed to the SMC, for example, a definition of the release that will contain the fix, as detailed in the release management process
- The SMC and HSH use PowerHelp and close a call when the fix has been distributed to the relevant equipment. This may be fairly simple if it is on the central servers, but it may involve considerable work if it requires a code release to all post office counters

4.2.4 Role of fourth line support

The fourth line support unit receives the request and does one of the following:

- Returns with a recommendation for action that the SSC can carry out
- Returns with a workaround that the SSC can progress as if it had generated it
- Rejects the request, for example, on the grounds that the problem will be resolved in a system software release that is due imminently
- Identifies a fix but does not produce it until authorised by the Release Management Forum

Where necessary, internal Pathway fourth line support also provides the interface with PinICL for external fourth line support units and updates the PinICL with progress reports.

A number of units provide fourth line support to the Pathway system as described in the following sections.

4.2.4.1 Pathway Development and A&TC

These development teams use the PinICL system to manage calls. Their process is essentially the same as the SSC with the exception that any development required to resolve a problem goes through the release management process.

FUJ00232449

The SSC and the development team discuss the problem and assign the PinICL call to either a specific development team, if the product has been identified, or to the general development team, if not.

If the development team requires additional information, it redirects the call back to the SSC which returns the call to the development team once they have obtained the required additional information.

If a patch is produced to resolve the call, this is handled through the release management process.

4.2.1.2 Escher

Escher also uses the PinICL system. The process for routing a call to Escher is via the Pathway development team and therefore the process is as described above.

4.2.1.3 OSD

Generally where OSD acts as fourth line support, it also has responsibility for first, second and third line support - therefore, the procedures involved are entirely OSD internal procedures. In those instances where SSC, not OSD, provides third line support the procedures as defined in 4.2.4.1 will be followed.

4.2.1.4 Eicon

Eicon do not use the PinICL system, but require calls to be logged by calling GRO Note that this telephone diverts outside normal office hours to Eicon's Canadian call centre. 12 SSC staff are registered with Eicon as having the authority to raise calls, and 2 SSC staff members have undergone training with Eicon in diagnostic requirements.

Escalation to Eicon management for any issues is via the SSC manager and the Eicon Service manager. As of 30/12/1999 this was Dan Dixon,

The Eicon contract is held in FEL01 by the Finance Director

4.3 Operational change

The SSC has access to the live system which can be used to correct data on the system when this has been corrupted in some way. The procedure for doing this is as follows:

The originator of the change:

1. Completes an Operational Correction Request (OCR) form for every change to data on the live system.

FUJ00232449

The originator may be anyone within ICL Pathway, but is normally the Duty Manager, or a Problem Manager or Business Support Manager when an incident or problem has been caused by an error in the data. It can also be completed by an SSC staff member who detects that the data in the system has become corrupted in the course of diagnosing a fault

2. Emails the OCR form to an authoriser, electronically signing it where possible, and where this is not possible, telephoning the authoriser to confirm that they are sending an OCR.

   The authoriser must be one of the following:

   - Duty Manager
   - Business Support Manager
   - CS Operations Manager
   - SSC Manager
   - Release Manager

The authoriser:

1. Authorises the change, or reports back to the originator why they are not authorising the change
2. Forwards the OCR form to the SSC electronically with an encrypted electronic signature file

The SSC staff member who is to perform the change:

3. Checks the electronic signature of the authoriser
4. Stores the OCR form and the signature file in the `received OCRs` folder on the SSC server
5. Wherever possible, produces a script to make the data change and tests the script on the SSC reference rig prior to running it on the live system
6. Completes the relevant sections on the OCR form to confirm whether they have produced and tested a script or not
7. Prior to making the change on the live system, documents the state of the affected part of the system and completes the regression path details on the OCR form.

   Note. If no regression path is possible, this must be stated on the OCR form

8. Makes the change on the live system.

   At least two people must be present when making changes to the live system. Normally these are SSC staff, but can be one SSC staff member and one person from the fourth line support unit responsible for the area in which the data change will take place, or one SSC staff member and one OSD staff member

9. On completing the data change, documents the state of the affected part of the system and mails an electronically signed copy of the OCR form to the second person who was present while making the change

FUJ00232449

10. The second person also electronically signs the form and emails it to either the SSC Manager or the SSC web site controller
11. Updates the PinICL and reports back to the originator to confirm that the change has been completed

The SSC Manager or SSC web site controller:

12. Checks the electronic signatures
13. Files the OCR in the completed OCR folder on the SSC server

4.4 SSC reference kit

4.4.1 Overview

The SSC reference kit consists of two rigs at BRA01. One is the reference rig for the live system and the other is the reference rig for the next release of software.

OSD maintains both rigs. The live reference rig is operated and managed by OSD. The second rig is operated and managed by SSC staff.

The general requirement is for the SSC to have reference kit that mirrors as closely as possible the equipment in use at any post office. The function of this kit is to duplicate problems reported by customers in a controlled fashion. The SSC also uses the reference kit to provide a link to live system diagnosis and, where authorised, data change.

4.4.2 Updating the hardware asset register

The SSC maintains a hardware asset register for all of Pathway CS. The following section describes the procedure to add to and remove hardware from the asset register. Note that this procedure includes all CS IT kit not just reference kit.

4.4.2.1 Adding new hardware

Whenever hardware is added within Pathway CS at Bracknell the asset register is updated. The CS staff member sends an email to the SSC Manager in the following format:

Asset Serial	ICL serial number
Asset Manufact Serial	Manufacturer's serial number (non-ICL)
Asset Product	For example, Compaq Deskpro
Asset Owner	For example, Rig *xxx*
Asset Owner Building	BRA01
Asset Owner Location	For example, Rig Room
Asset Owner Charge Code	For example, UPA66
Asset Comments	For example, Correspondence Server C
Asset hw or sw	HW or SW

FUJ00232449

Owning Asset	For example, Rig name
Value at Purchase	If known
Date of purchase	Formatted as *dd/mm/yy*
Depreciation Years	Always 3
Current Value	Leave blank

4.4.2.2 Removing hardware

Whenever hardware is removed from Pathway CS at BRA01, the asset register is updated. The CS staff member sends an email to the SSC Manager in the following format:

Asset Serial	ICL serial number
Asset Manufact Serial	Manufacturer's serial number (non-ICL)
Asset Comments	Where to

4.5 Diagnostic information

The SSC, as third line support for products in the Pathway system, has responsibility for ensuring that first and second line support units are provided with sufficient information to enable them to diagnose known problems correctly and to provide advice and guidance to the customers.

In this way, support requests from customers that are passed to the SSC should be restricted to either complex end-to-end process problems that require in-depth analysis of all of the systems involved or new software faults.

4.5.1 Maintaining the Known Error Log on the SSC intranet site

The SSC generates and maintains a Known Error Log (KEL) system that uses searchable documents in HTML format. The mechanism for searching is a query entry in an intranet site. The KEL system is available to first, second, third and fourth line support units as well as SSC staff.

4.5.2 Transferring knowledge between support units

The SSC intranet site has KEL search facilities and other useful diagnostic data, documents and tools.

SSC and SMC staff raise KELs based on customer-observed symptoms.

KELs are further maintained once the fault has been resolved.

4.6 Diagnostic tools

4.6.1 Overview

The SSC develops and maintains tools that can assist in the diagnostic process. The SSC diagnosticians develop the tools themselves; the individual authors are responsible for maintaining these developments.

FUJ00232449

Development is performed on an ad hoc basis whenever there is a requirement to generate a tool to assist in the diagnosis of faults.

All diagnostic tools are registered on the SSC intranet site.

The tools themselves are made available to all members of the SSC and, where they are able to assist other support units within Pathway, they are made accessible together with any documentation about their use.

4.6.2 Developing diagnostic tools

Before developing a diagnostic tool, establish whether or not the required tool has already been produced by reference to the diagnostic tools database on the SSC intranet site. This database contains details of known diagnostic tools developed in the SSC and by other support units.

1. If a suitable tool already exists, it should be used
2. If a suitable tool does not already exist, the SSC staff member:
   (a) Defines the requirement for the tool to the SSC Manager
   (b) Waits for authorisation before proceeding
3. If the diagnostician has sufficient development skills to develop the tool him or herself, the SSC Manager schedules the development work required
4. If the diagnostician does not have sufficient development skills to develop the tool, the SSC Manager:
   (a) If these skills are available within the SSC, identifies the resource required to develop the tool
   (b) If necessary, goes outside the SSC to obtain the development resource
5. Log the fact that the tool is being developed in the diagnostic tools database on the SSC intranet site and forward this information to all of the relevant units which may have use of this tool
6. Maintain a copy of the tool in the diagnostic database on the SSC intranet site

4.7 SSC intranet site

This site was created by and is maintained by SSC staff, although it provides a resource for other support staff within the Pathway estate.

The following sections describe the key features of the site. As the contents of the site are under constant review, the following details may change.

4.7.1 Known Error Logs (KELs)

The intranet site holds known error details in Microsoft Word format, the contents of which may be searched for, in full text form. Documents are created to a defined template wherever possible. An application has been generated which limits the properties of the document to a subset of possible

FUJ00232449

values, for clarity and ease of search. This application is made available to all support units.

The process for creating KEL entries outside of the SSC has not yet been formulated, but it is expected that no KEL will be allowed onto the system before it has been authorised by SSC staff.

4.7.2 Change proposals

The intranet site holds copies of each Change Proposal (CP) in a searchable form as Microsoft Word documents. These documents are **not definitive**. As copies of the CPs are taken before they reach the Pathway Change Control Board the status of any CP is indeterminate - it may, or may not, have been approved.

Maintaining the CPs in this form allows diagnosticians to see that someone has looked at an activity in an area of the Pathway operations regardless of whether or not that activity was actually carried out.

4.7.3 Release management

The Release Management database is held on the same server as the Intranet site. This database is used to control the flow of fixes through the Operational Testing processes and through release to the live environment.

The intranet site provides a controlled interface to this database, allowing searches to be made by:

- **Date**
  For example, show all fixes applied to the live environment since date *xxxx*
- **PinICL**
  For example, show the state of a PinICL in the release process (delivered, due to be tested, due to be released to live)

Similar searches can be made on a Release note as described for a PinICL.

4.7.4 Operational Change/Corrections

The intranet site holds copies of both SSC Operational Correction Requests and OSD Operation Change Requests. The intention being to provide a mechanism in which both urgent and planned changes at the operational level can be viewed quickly.

OSD have control over the OSD change requests, and the SSC intranet site provides a repository and search mechanism only. For SSC Correction requests, inserting the data into the intranet server is mandated by the process – Appendix B of this document.

FUJ00232449

4.7.5 Work Instructions

There is a requirement for Work Instructions which may augment, or temporarily replace documented procedures. These are logged and maintained on the SSC Intranet site. There is a password protection mechanism, so that only the SSC manager, or nominated deputy, can create new, or amend existing Work Instructions. All staff are allowed to search the work instructions

4.7.6 Other facilities

The intranet site also contains smaller sections that provide:

1. Links to commonly used web sites
2. A bulletin board for SSC staff to add points of interest regarding the operation of the live system
3. Access to commonly used SQL queries and other items of code
4. Access to various documents relating to the live system

4.8 Access to the live system

All diagnostic staff in the SSC (product specialists and systems specialists) have access to the live system via PCs (see Appendix D for build details) that are connected to a private LAN in BRA01. Patch panels enable staff to use these PCs to access the test rigs in BRA01.

The build script for these PCs was written by OSD, but is held in the SSC. The PC build was performed in accordance with the Access Control Policy.

Access from the PCs to the live system to the live system is controlled by SecureID, uses firewalls, and an encrypted link, and conforms to the Access Control Policy.

The SSC access to the system is for two purposes:

- Assist in diagnosis of problems on the live system
- Correct data which has become corrupted

In the second case, SSC staff may only correct data in response to an authorised Operational Correction Request and only then when there are two or more people present.

4.9 Additional technical support to Pathway CS

In addition to the normal support activities, the SSC provides other technical resources to Pathway CS. It is the only unit with sufficient access to the live systems to be able, for example, to analyse:

- Riposte message store
- Counter event logs

FUJ00232449

- Central system NT event logs

Consequently, the SSC runs daily checks for:

- Post offices that have not communicated with the central systems for 24 hours
- Any NT events that indicate that TIP processing has failed or that transactions have not been harvested

It is also able to respond to other specific requests such as:

- Number of reboots performed by each counter in the estate
- Analysing the message store to investigate a suspected breach of security at a counter or one of the central systems

CS units requiring such information contact the SSC Manager or the appropriate diagnostician who deals with the request as promptly as possible.

FUJ00232449

5 Operational Test Team (OTT)

The Operational Test Team (OTT) within Pathway CS is responsible for testing fixes prior to their application to the live environment to ensure that they work and do not adversely affect the environment.

5.1 Overview

To test a software fix, the Operational Test Team carries out the following activities:

- Scheduling the testing
- Controlling the testing
- Recording rig problems
- Controlling OTT documents
- Recording the fix level of a rig

The following sections describe the process.

5.2 Scheduling testing

The main test scheduling task is carried out using the Release Management Data Base in conjunction with Release Management.

The OTT team does the following:

1. Populates the OTT testing cycle on the RMDB and allocate resource.
2. Ensures that sufficient documentation is available for the testing purposes
3. Receives Release Note from RM
4. Liaises with OSD to get the fix applied to the test rig
5. Files the documentation when testing is complete.

   If the fix is rejected during testing due to a fault, OTT send it back to the relevant unit for correction..

   If multiple software fixes are included on one Release Note, one may fail while the others are successful. In this case, if the fixes are dependent on each other the whole release is rejected, or, if the fixes are independent the Release Note may continue and the failed element is re-scheduled to join a later release of fixes.
6. Updates the release database to show the fix has been tested successfully (or rejected (with a reason))
7. OTT sends the software fix release note back to Release Management.

FUJ00232449

5.3 Controlling testing

This section describes how the OTT control testing.

When fixes are fast tracked, some of the preparation, for example, documentation, may have been delayed until after the release has been distributed. Therefore, some of these activities are revisited to complete the full schedule of preparation and testing as identified on the software fix release note.

1. Testers use copies of the following information, where relevant :
   - Release note
   - Relevant PinICLs
   - Handover note
2. When a test has been scheduled, the testers carry out the following actions:
   (a) Produce the test script
   (b) Undertake any other preparation necessary for the test
   (c) Carry out the test to confirm that the problem occurs as expected
   (d) The fix is applied to the test rig (by OSD)
   (e) Test after the fix has been applied
   (f) Test after the fix has been regressed
   (g) If the fix passes the test, pass the relevant documents and the updated test script to the OTT Manager. If the fix fails the test, return it to fourth line support for redevelopment.

5.4 Recording rig problems

Rig problems are recorded in log books. There is one log for each of the rigs used by OTT. The log book is kept by the counters belonging to the rig.

1. Whenever a problem is found on a rig, OTT makes an entry in the appropriate log book. The kind of incidents that are logged are:
   - Hardware faults on any of the kit
   - Errors reported by any of the kit
   - Communications faults
   - A fix applied to all hardware except counters
   - A fix removed from all hardware except counters
   - Anything for which a call is logged with HSH or SMC
2. The entry in the log book includes the following information:
   - Date of the incident.
   - Details of the incident

FUJ00232449

- Call number - if the incident is reported to HSH or SMC
- Status of the incident with HSH or SMC. That is, Open, Closed, with HSH or SMC

3. When the incident is resolved, OTT updates the log with:
   - Closure information
   - Date of closure

5.5 Controlling OTT documents

This section describes how OTT maintain documents and notes.

OTT maintains all documents on the machine `Sscdiag4` in folder `OTTShare`.

5.5.1 Creating a new OTT document

To create a new OTT document, the OTT staff member carries out the following steps:

1. Allocates a new number for the document from the appropriate index file
2. Updates the index file to show the newly allocated number and prints a copy of it
3. Creates the new document using the appropriate template
4. Informs other team members that they have created a new document

5.5.2 Updating an existing OTT document

To update an existing document, the OTT staff member carries out the following steps:

1. Locates the document by referring to the appropriate index file
2. Updates the document
3. Informs other team members that they have changed the document

5.6 Recording the fix level of the test rig

A white board documents the fix level of all the counters attached to the OTT rig.

OTT updates the white board whenever:

- A fix is applied or removed from a counter
- A counter is rebuilt or replaced

FUJ00232449

6 Release Management

This section describes the operations performed by Customer Service Release Management team. The CS Release Manager (CSRM) is responsible for authorising changes to the live Horizon environment.

The following procedures are described:

- Deciding whether a software fix should be developed
- Defining the release plan and time scales
- Managing the delivery of supporting services
- Creating the software fix
- Re-raising a release note
- Authorising the software fix
- Completing the release process

Appendix A contains a block diagram of the process.

6.1.1 Deciding whether a software fix should be developed

This section describes how ICL Pathway CS decide if a fix should be implemented for a problem. See Appendix A.4 process diagram.

1. ICL Pathway CS holds a Release Management Forum weekly to decide what fixes should be created and to assess the impact of any associated risk. Representatives of each unit involved in the software release process attend the RMF meeting as follows:
   - System Support Centre
   - ICL Pathway Development
   - Operational Test Team
   - Configuration Management
   - Customer Service
   - ICL Outsourcing
   - Other units as required

   The SSC represents the customer in the RMF in terms of the calls made to the helpdesks. The Service Managers know of other problems that are significant to the customer, through parallel escalation processes. The Service Managers feed their knowledge into the RMF through the CSRM
2. The CSRM sends a list of all outstanding open calls to each member in advance of the RMF meeting, allowing the attendees to identify their requirements.

FUJ00232449

The calls are cleared calls, that is, have a corrective action in place and are awaiting closure, either because the decision has not been made whether to create a fix, or the decision has been made to create a fix and it has not been completed

3. Each attendee brings with them information about the dependencies, priorities, risks, issues, alternative options and time scales for the open PinICLs. It may not be possible to estimate how long certain activities will take until the priorities have been agreed, therefore, some information may not be available until after the RMF meeting

4. The open calls are discussed, with the information provided by the members. For example, details of any workaround and business impact, until the situation is understood. Then the RMF decides whether a release is required

5. If SSC consider a problem too urgent to wait for the weekly RMF meeting, it requests the CSRM to fast track the fix.

   The CSRM assesses the situation and, based on the priorities of each unit, the risk of releasing the fix, the alternative options, any dependencies between fixes and any other issues, decides either the problem can wait until the weekly RMF meeting or agrees to a fast track solution.

   If the fix is fast tracked, the CSRM holds a virtual forum by taking the release request to each RMF member (in person or by phone, fax or PinICL) for input and sign off. The activities in the high level plan are reduced to a minimum before the release and the rest of the activities, for example, documentation, are carried out after the release has been made.

   In an emergency, the following people can authorise a fix to be produced without contacting the CS Release Manager:

   - SSC Manager
   - CS Operations Manager
   - Problem Manager

   If this happens, the person authorising the fix ensures that the CS Release Manager is informed so that the release process can incorporate the fix.

   Where an emergency fix has been applied to get systems up and running, release management processes may be applied retrospectively

6. If the RMF decides not to develop and release a fix, one of the following actions takes place:

   (a) The RMF decides that a live problem can wait until the next major software release. In this case, the CSRM clones the call on the new release and returns the call on PinICL to EDSC.

   (b) If the original is not a live fault it is upversioned and returned to Gen Dev.

   (c) The RMF identifies the call as not being a problem at all, that is, the perceived shortfall is the way the system was designed to work. RMF

FUJ00232449

returns the call to the originator so they can raise a change request for an enhancement to the system

(d) If rejection is considered to have significant impact to the customer, the CSRM escalates the problem to the Customer Satisfaction Manager before authorising closure of the call

Note: Fourth line support PinICLs include problems that are not in the current live environment. These are not relevant to the release management process and are managed by development. However, if a fourth line support PinICL identifies a problem in the current release, the RMF decides whether or not to postpone the fix.

6.1.2 Defining the release plan and time scales

Once the decision has been made to create a fix; the following issues may need to be taken into account.

1. Any dependencies between calls
2. Any situations where a new release will run in parallel to an old release before the old release is upgraded.
3. The priority of each fix according the different needs of each CS unit.
4. CSRM updates the report for POCL, for which they are currently responsible, with the expected completion date to resolve the call
5. For most releases, the delivery date is not significant. The release is simply distributed at the earliest convenient time. For releases that have a significant date line, the following steps are taken:
   - Each unit involved in the release provides details of the time scales in which they can complete the required work
   - All parties involved agree to a high-level plan for each release

   The CSRM is responsible for determining the availability of the Operational Test Rig. and co-ordinating the allocation of users to it.
6. The CSRM:
   (a) Creates a software fix release note
   (b) Captures all the information and raises a release PinICL for each release.

   The Release PinICL references all the PinICL calls (or HSH / SMC calls) that it covers and each original PinICL call is updated with the new Release PinICL number. Progress queries on the original PinICL calls are found by reference to the software fix release note attached to the new Release PinICL

   (c) Attaches the release note to the PinICL and sends it to PIT
7. The manager for each unit updates the release PinICL with details of their progress
8. The CSRM monitors the progress of the software fix release note by accessing the release PinICL and manages any deviations from the high-

FUJ00232449

level plan to ensure that all units are aware of the delay and the impact can be minimised. The CSRM does this by negotiation with the different units in the release process both in and outside of the RMF.

If necessary, the CSRM escalates problems to Service Management

Notes:

1. The CSRM owns the plan
2. A release PinICL is a different kind of PinICL to those used by SSC so that it is not counted in problem statistics

6.1.3 Managing the delivery of supporting services

See Appendix A.5 process diagram

Other units may be involved in the release process who are not part of the normal RMF, for example, training, helpdesks, documentation, bench-marking, hardware installation. In most cases fixes will not affect these units, but, if any of these units are involved, the CSRM co-ordinates their activities, identifying any testing requirements and receiving notification from the units when their preparation are complete, as follows:

- For HSH and SMC: notification of operational readiness
- For documentation: notification of completion of update, and the documentation itself, so that CSRM can distribute it
- For hardware: notification of operational readiness.
- For user training: notification that the training material is ready, trials of the material are scheduled on the Operational Test Rig, training is delivered where necessary

Provided that all the supporting preparation is complete, CSRM sign off the release note.

Note that the time taken for the distribution of the documentation has to be taken into account in the delivery schedule of the release.

Most fixes do not normally affect any of these other units.

6.1.4 Creating the software fix

Fourth line support creates the fix and the Tivoli installation scripts, and unit tests and documents the fix. Any fixes that fail testing must be recreated.

ICL Pathway development complete the release note with details, such as the affected estate, and send it via PinICL to Configuration Management. If external fourth line support are involved, ICL Pathway development manage them and complete the release note on their behalf.

6.1.5 Re-raising a release note

A software fix could fail in OTT or it could be applied in the wrong way. When a failed fix is investigated and the content of the release is found to be at fault, then one or more new work-packages are developed. CSRM withdraw

FUJ00232449

the original software fix release note and raise a new one to cover the new work-package(s).

Information about the new work-packages is typed into the existing PinICL as a new progress commentary. The associated PinICL record in the Release Management database is amended by the adding a suffix letter, starting with 'a' to the record name. For example the record name PC0001589a indicates that the initial fix associated with PinICL PC0001589a has failed and that a new one needs to be delivered.

6.1.6 Authorising the software fix

The CSRM authorises the software fix release, having:

1. Ensured that all testing and preparation is complete
2. All sign offs have been attained.

6.1.7 Completing the release process

1. Either OSD/SMC or OSD Service Management distributes software. After the software has been distributed, CSRM receive notification of the success or otherwise of the release:
   - If OSD/SMC or OSD Service Management confirm the successful release of the software, CSRM receive the release PinICL from CM. If the delivery was only to the pilot estate, which may be the case for high risk fixes, CSRM authorise the full delivery to go ahead
   - If the distributing unit report problems with the distributed software, CSRM may authorise the regression of the release. (Regression means withdrawing the software fix that had been installed)
2. Provided that the release is successful, CSRM sign off the release note as complete. CSRM then close the release PinICL.

6.1.8 Work Instructions

A set of work instructions complement the processes above. They are held on the Customer Service V drive with an index at v:ReleaseMgt\CSRM Working Documents\DocPlan_Index_1

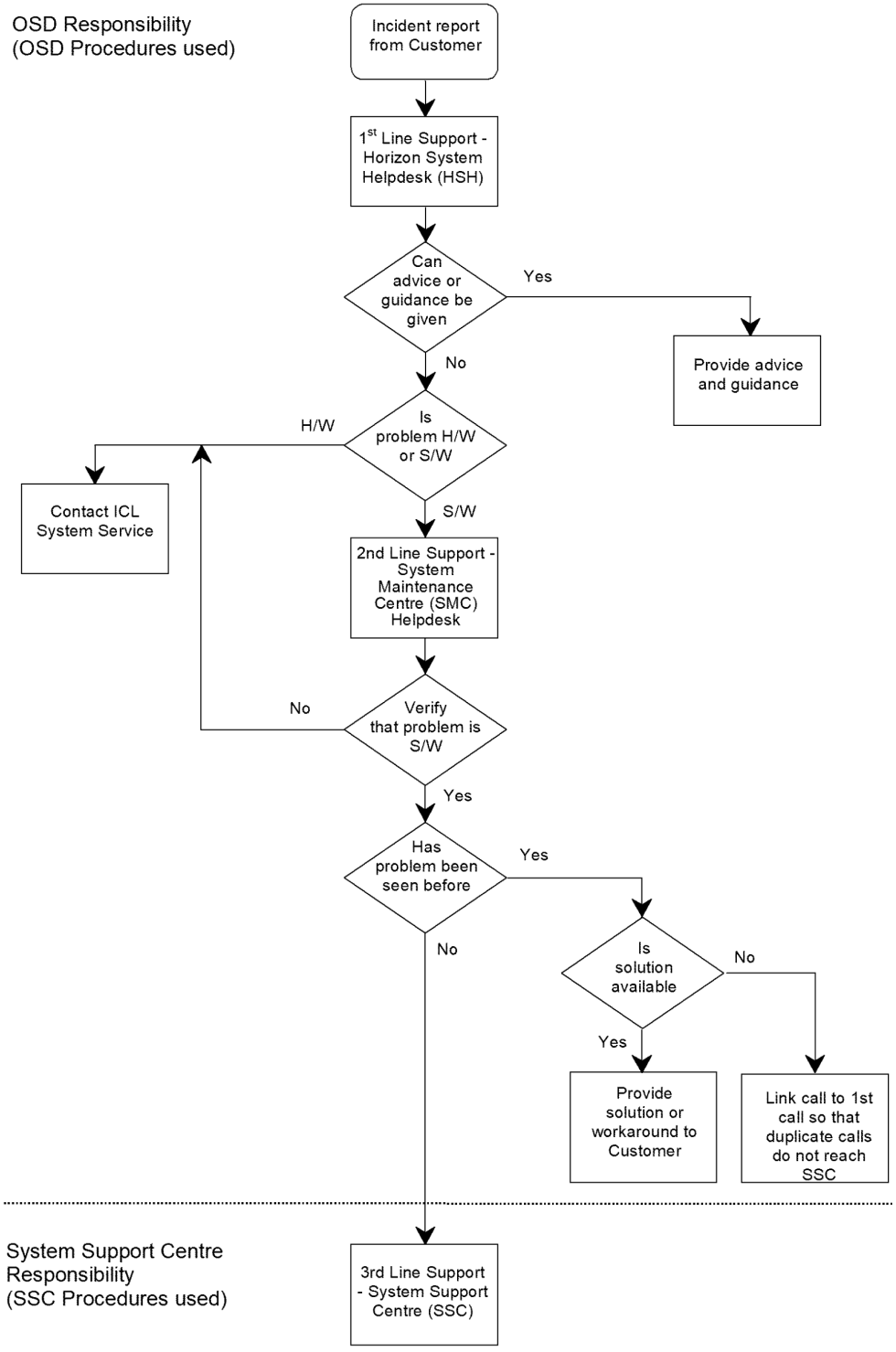
7 Business continuity

The Pathway CS Support Services Manager is responsible for ensuring that a business recovery plan is in place for the SSC. See Appendix C for details.

FUJ00232449

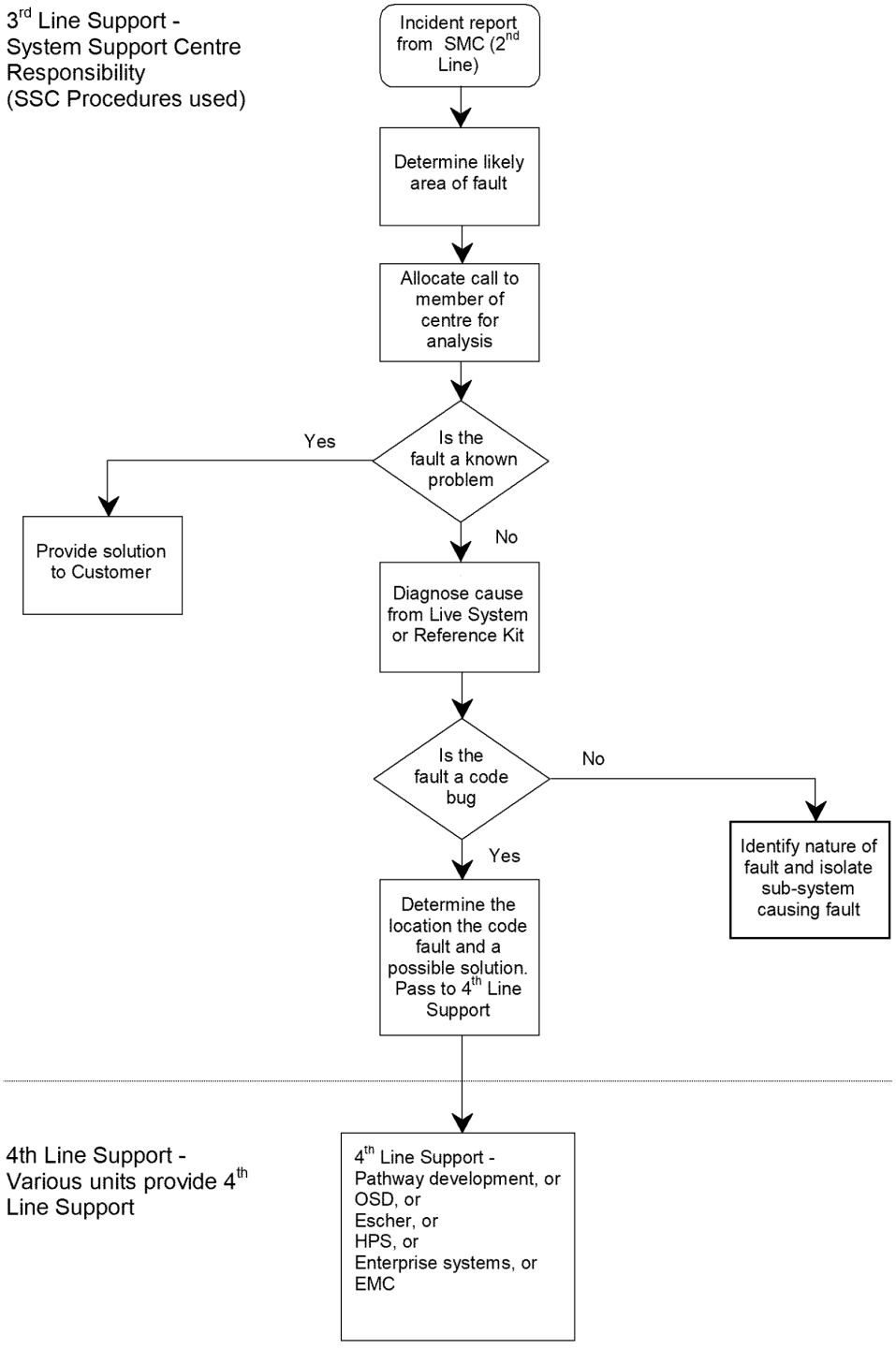
8 Appendix A Process diagrams

A.1 First and second line support



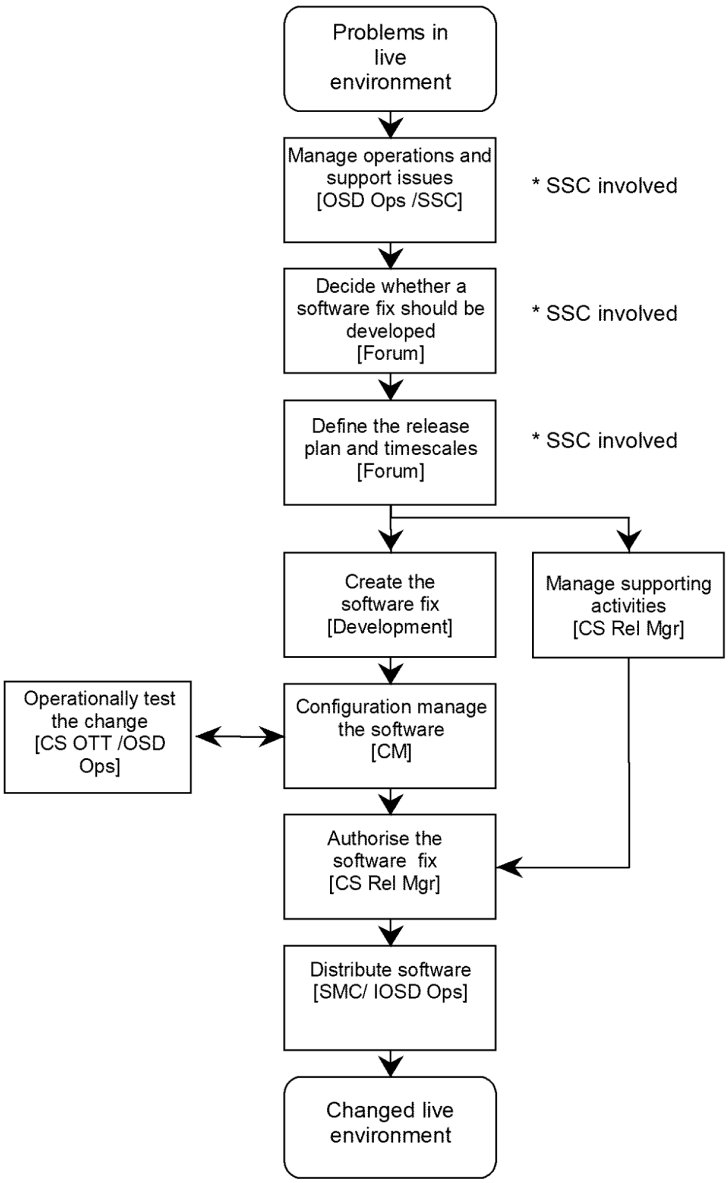
FUJ00232449

A.2 Third and fourth line support



FUJ00232449

A.3 Support and release management process

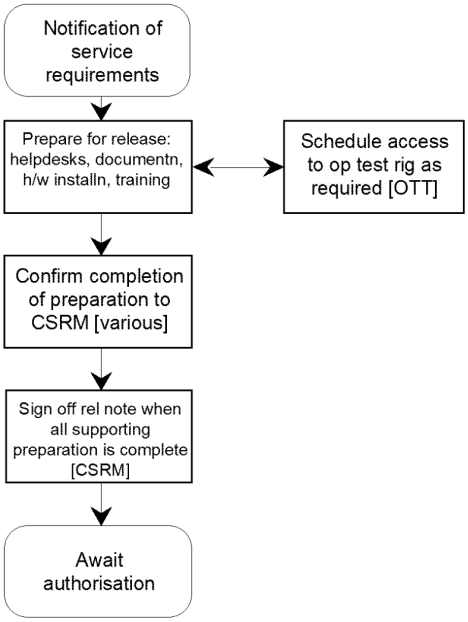


FUJ00232449

A.4 Deciding whether a software fix should be developed

FUJ00232449

A.5 Managing the delivery of supporting services



FUJ00232449

9 Appendix B Operational Correction Request form

The following page contains an example of an OCR form.

FUJ00232449

ICL Pathway SSC Operational Correction Request (OCR)

OCR Title	

Raised by (Name)		Location	
Date/time raised		Type of change (e.g. SQL script)	
System to be changed (e.g. PAS/CMS)		Required to be done by (date/time)	

Associated PinICL number	

Authorization signature		Authorizer (Print name)	
Authorization date		Authorizer position	

DATABASE Changes		FILE Changes	
Table name		File name	
Parameter description		File location	
Helpdesk screen		Location of backup	

Purpose and details of the change

FUJ00232449

Regression path	
Work done by (SSC signature)	
Work done by (Print Name)	
Witnessed by (SSC or 4th line signature)	
Witnessed by (SSC or 4th line Print name)	
Completed at (Date and time)	
Was change tested on reference rigs prior to application to live	YES / NO
System state before change	
System state after change	
Comments	

See notes on the reverse of this document for the procedure for use.

FUJ00232449

ICL Pathway SSC Operational Correction Request Process

The SSC has access to the live system which can be used to correct data on the system when this has been corrupted in some way.

The correction originator must –

i) Complete an OCR form for every correction to data on the live system.

This can be done by anyone within ICL Pathway, but is normally completed by the Duty Manager, other Problem Manager or Business Support Manager when an incident or problem has been caused by an error in the data. It can also be completed by SSC staff members who, in the course of diagnosing a fault detect that the data in the system has become corrupted.

ii) Email the OCR form to an authorizer, electronically signing it where possible, and where this is not possible, telephoning the authorizer to confirm that the OCR is being sent.

The correction authorizer must be one of the following -

- Duty Manager
- Business Support Manager
- CS Operations Manager
- SSC Manager
- Release Manager

The correction authorizer will

i) Authorize the correction, or report back to the originator to specify why the correction is not being authorized

ii) Forward the OCR form to the SSC electronically with an encrypted electronic signature file.

The SSC staff member who is to perform the correction will

i) check the electronic signature of the authorizer before proceeding

ii) Store the OCR form and the signature file in the “received OCRs” section on the SSC server

iii) Wherever possible, produce a script to make the data correction, and test this on the SSC reference rig prior to it running on the live system. Sections in the OCR form confirm whether or not this has been done.

iv) Prior to the correction being made, document the state of the affected part of the system on the OCR form.

v) Prior to the correction being done, complete on the OCR form the regression path details. If no regression path is possible, then this must be stated.

vi) When corrections are to be made to the live system, at least two people must be in attendance. This will normally be SSC staff, but can be one SSC staff member and one person from the 4th line support unit responsible for the relevant area in which the data correction will take place, or one SSC staff member and one OSD staff member.

vii) On completion of the data correction, document the state of the affected part of the system and mail an electronically signed copy of the OCR form to the “witness”. The witness will then also electronically sign the form and email it to either the SSC manager or the SSC web site controller.

FUJ00232449

viii) Update the PinICL and report back to the originator to confirm that the correction has been completed.

The SSC manager or SSC web site controller will

ix) Check the electronic signatures

x) File the OCR in the “completed OCR” section on the SSC server.

FUJ00232449

10 Appendix C SSC Business Recovery Plan

10.1 Section 1 ICL Pathway Generic

10.1.1 Introduction

This appendix provides instructions for staff working for ICL Pathway SSC on how to respond to a major incident affecting the building at BRA01, personnel, assets or the business.

The SSC is responsible for the safekeeping and communication of the business continuity plan within the team.

This plan has been developed to ensure that Pathway can recover from a major disruption in a timely and efficient manner. However, the existence of this plan alone does not guarantee a successful recovery. This plan must be kept current as personnel, equipment, facilities, and business processes change. The participants in the recovery process must know and understand their roles in the execution of the plan. Physical and information environments on which the plan depends must be monitored to ensure that they are being maintained and are available for recovery if needed. Furthermore, the plan must be tested regularly for validity.

10.1.2 Objectives

The primary objectives of the SSC business continuity plan are:

- to provide a tested vehicle which, when executed, will permit an efficient, timely resumption of all critical business functions in order to continue operations
- to contain, within acceptable levels, the financial and operational impacts that Pathway could suffer following a disruption
- to minimise impacts upon customers
- To minimise the impact to the public and to the industry image of Pathway

10.1.3 Scope

This plan provides for recovery of the SSC operations within one working day of a disruption.

The plan covers:

FUJ00232449

- staff relocation
- communication with customer and suppliers
- recovery of critical records
- rebuild of critical equipment

10.1.4 Assumptions

The Plan has been developed with the following assumptions:

- correct data files are backed up and stored remotely
- office IT at FEL01 will be available within 2 hours of invocation
- all necessary critical records have been stored offsite and can be recovered within two hours after an incident has been notified to the SSC Manager or his deputy

10.1.5 Change Management

This plan will be reviewed regularly

10.1.5.1 Change Checklist

Changes that may affect the plan are:

- SSC personnel and related details
- critical business functions
- third Parties providing support to the SSC
- software
- hardware
- critical records.

10.1.6 Audit

Audit of the plan will be conducted according to the ICL Pathway Audits policy and annual plan.

10.1.7 Testing

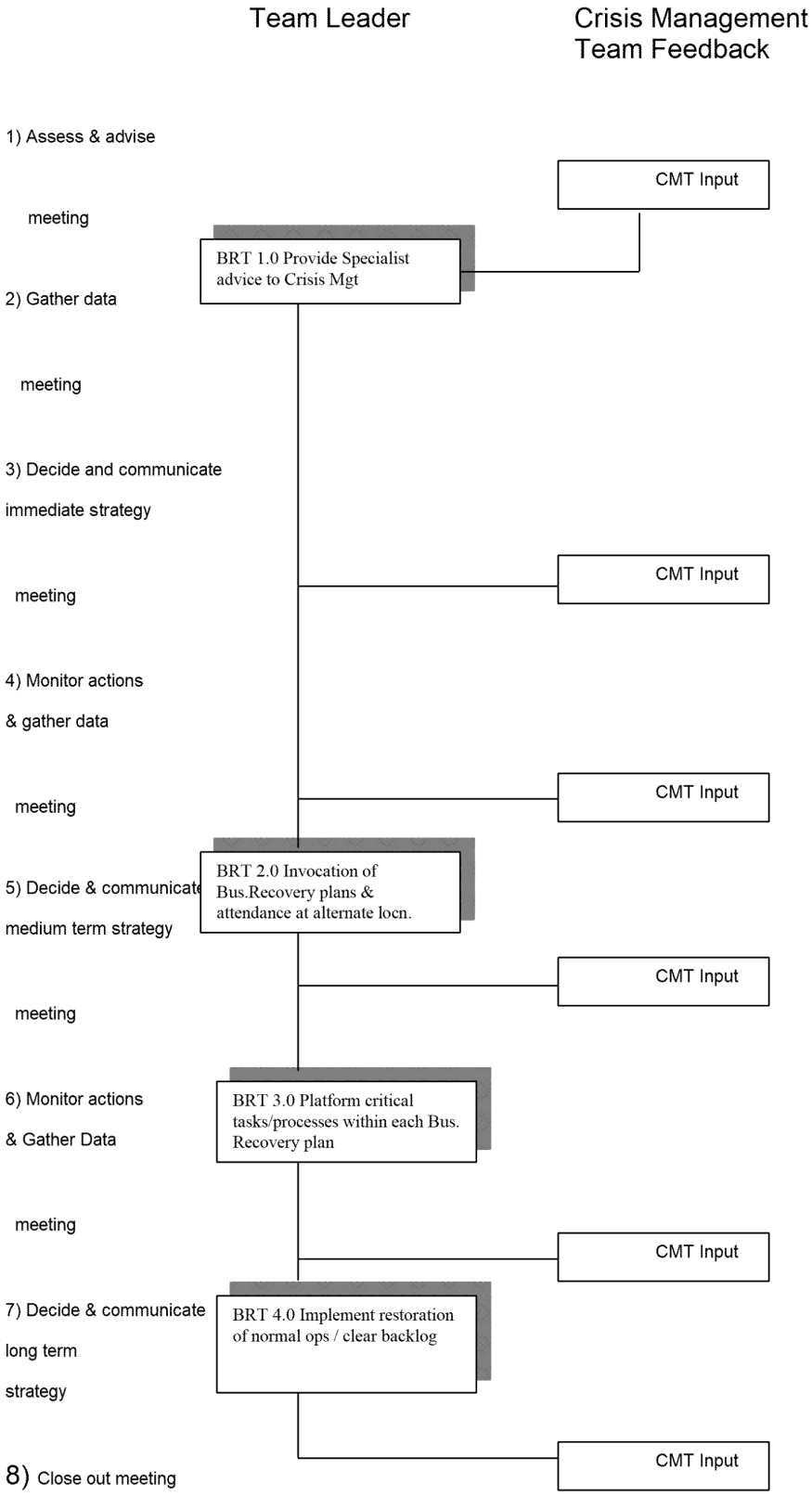
The plan will be reviewed once per annum or when significant organisation changes take place. Any resulting plan changes will be collated and incorporated into this document and the plan re-issued.

FUJ00232449

10.1.8 Business continuity process at Pathway

This plan is derived from the document "Business Recovery Plan 704 Systems Support Centre", which defines the Pathway business continuity process (BCP). The following flowchart shows the flow of high level activities that make up the BCP.

FUJ00232449



FUJ00232449

10.2 Section 2 SSC specific

10.2.1 Strategy explanation

In the event of a disaster affecting BRA01 which is so severe that the existing arrangements for UPS, backup generators etc are ineffective, that there is a total building loss, then some SSC staff will move to FEL01.

SSC access PCs, which are used to access the live system, have been built and will be maintained in a secure area in FEL01.

A room in FEL01 which has been set up with the required firewall and connections to the live service will be used, and SSC staff will connect their own PCs into the available sockets.

OSD staff will be required during this process as a final check on the connections to the live system through routers and firewalls.

SSC maintains all essential data on the SSC web site, off site copies of which are held by both the senior technician and the SSC manager. These copies will be used if necessary to recover the web site, which contains diagnostic information, including Known Error Logs.

10.2.2 Pre-disaster Actions

1. Ensure that the essential documentation on the SSC web site is correctly backed-up, and that off-site copies are maintained.
2. Ensure that essential equipment is lodged at the backup site (FEL01) in a secure area
3. Ensure that the essential SSC staff who will travel to FEL01 in the event of an emergency have access to the site, and to the secure area where the kit is maintained.
4. Ensure that OSD have installed, and are maintaining the required communications connections from the backup site to the live estate.

10.2.3 SSC Contact numbers

Surname	Forenames	Home phone No.	Status
Anscomb	Jim	GRO	
Ballantyne	John		
Carroll	Patrick		Senior Technician
Chambers	Anne		

FUJ00232449

Coleman	Richard		GRO	
Critchley	Graham			
Foster	Bob			
Greenwood	Kath			
Harvey	Martin			
Hawkes	Chris			
Longley	Barbara			SSC Coordinator
Maxwell	Gary			
O'Connor	Aidan			
Oladapo	Lara			
Parker	Steve			Senior Technician
Patel	Rakesh			
Peach	Mik			SSC Manager
Rowe	Diane			
Seddon	Dave			
Simpkins	John			
Simpson	Garrett			
Squires	Steve			
Steed	Paul			
Streeter	Neil			
Wright	Mark			

10.2.4 Action Checklist

TL-BRT1.0.1	**Team Leader or Deputy notified of an Incident by a member of CMT. Record name of caller.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT1.0.2	**Ensure that the Crisis Controller or Deputy has been informed**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT1.0.3	**Ensure that all staff stay by a telephone on stand by until otherwise informed**	Start Date/Time:	End Date/Time:	Complete: Y / N

FUJ00232449

TL-BRT1.0.4	**On receiving a call from the CMT, please ensure that the following is ascertained before undertaking any unrequested actions:**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT1.0.5	**1.Exactly what has happened ?**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL BRT1.0.6	**2.Who has been informed?**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT1.0.7	**3.What is the impact ?**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT1.0.8	**4.What is the estimated time of inoperability ?**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRTI.O.9	**5.Do 1 need to go to the alternate location ?**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT1.0.10	**6.Do 1 need to contact other staff ?**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT1.0.11	**7.How do 1 contact the CMT ?**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL BRT2.0.33	**Ensure that all staff are accounted for.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.34	**Obtain details regarding any personnel seriously affected by the Incident**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.35	**Contact Deputy (as available) and ensure that all other team members are contacted as soon as is reasonable**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.36	**When will you attempt to contact these staff again ?**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL BRT2.0.1	**Check with next of kin if these staff are away or on holiday etc.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.2	**Leave message that they are to contact the Team Leader before returning to work.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.3	**If unsure of the situation and cannot confirm it via the CMT, everyone should stay near the telephone that the CMT has the number for and await instruction**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.4	**Keep in regular contact with Team Members to reassure them that the situation is under control and provide advice.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.5	**When notified by the CMT, ensure that you and your staff pack and proceed to your Alternative Team Location as requested.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.6	**Identify any critical activities, documents, or actions possibly affected by the Incident**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.7	**Identify all critical aspects of work in progress**	Start Date/Time:	End Date/Time:	Complete: Y/ N

FUJ00232449

TL-BRT2.0.8	**Identify the key events that have recently occurred to the company.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.9	**Identify any deadlines that may occur soon.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.10	**Identify the extent of any lost data.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.11	**Identify any catch-up processes that may be required to perform.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.12	**Identify any work around procedures that may be required.**	Start Date/Time:	End Date/Time:	Complete: Y N
TL-BRT2.0.13	**Identify any special staffing requirements for the organisation.**	Start Date/Time:	End Date/Time:	Complete: Y N
TL-BRT2.0.14	**Identify any special projects that may alter the recovery priorities.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.15	**Inform the CMT members of the business requirements identified**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL BRT2.0.16	**Start the Incident Log**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.17	**Create a staff location list for all members of staff.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.18	**Assist with all personal problems arising from the Incident.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.19	**Maintain status information on any company personnel receiving medical treatment or other disaster related services.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.20	**Report the level of employee assistance being provided to the CMT.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.21	**If appropriate, arrange for petty cash to be made available.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL-BRT2.0.22	**If appropriate, arrange for hotel accommodation to be made available for members of staff.**	Start Date/Time:	End Date/Time:	Complete: Y / N
TL BRT2.0.23	**If appropriate, arrange travel for relevant members of staff.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.24	**Identify and arrange for essential equipment to be provided.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL BRT2.0.25	**Stand down other non-essential personnel & services.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.26	**If required to work at alternative location or away from home, consider the checklist items below:** **- Business Continuity Plan** **- Mobile phone** **- Charger & spare batteries**	Start Date/Time:	End Date/Time:	Complete: Y/ N

FUJ00232449

	- Travel plugs - Laptop - Charger & spare batteries - Money & Credit cards - Food & Beverages - Change of clothes - Overnight Bag - Own contact list - Passwords - Security Pass - Medicine - for personal use - Organiser / diary - Keys - Passport - Driving License			
TL-BRT2.0.27	**Inform close family of departure to Alternate Site or Crisis Management Site.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.28	**Provide the Incident Management Team with a contact list with the alternate site locations at which each team member is located**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.29	**Support Resumption Management in filling requests for additional personnel.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.30	**Assist in the creation and maintenance of internal phone directories to ensure communication among relocated business areas as necessary.**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.31	**Use company credit card where possible to pay for critical expenses and keep receipts safe so they can be sent to Finance staff**	Start Date/Time:	End Date/Time:	Complete: Y/ N
TL-BRT2.0.32	**Do not exceed a reasonable level of expenditure without authority from the CMT.**	Start Date/Time:	End Date/Time:	Complete: Y/ N

FUJ00232449

10.2.5 External Contacts

Listed below are the contacts who may need to be informed following an incident.

Name:	**OSD Belfast**	**Work:**	
Address:	Belfast	Home:	
		Fax:	
		Mobile:	
		EMail Address:	
	Contact Name:	Unix Team – Andy Gibson	
		NT Team – Darren Dillon	
Name:	**HSH / SMC**	**Work:** GRO	
Address:	STE09	Home:	
		Fax:	
		Mobile:	
		EMail Address:	
	Contact Name:	Ian Cooley	
Name:	**BRA01 Access Security consultants -**	**Work:** GRO GRO	
Address:	Via Workplace Technology	Home:	
	Fax:		
	Mobile:		
	EMail Address:	GRO	
	Contact Name:	Mike Wood /Paul Sinclair	

GRO

FUJ00232449

Name:	**Pathway Development**	**Work:** GRO GRO	GRO
Address:	ICL FEL01	Home:	
	Fax:		
	Mobile:		
	EMail Address:	GRO	
	Contact Name:	Peter Jeram	
Name:	**CS Support Services Manager**	**Work:** GRO GRO	GRO
Address:	ICL BRA01	Home:	
	Fax:		
	Mobile:		
	EMail Address:	GRO	
	Contact Name:	Peter Burden	

FUJ00232449

10.2.6 Vital Records

This list contains all the vital records for the department. These records should be re-created as part of the departmental recovery process.

Record Name: Operation Manual

Media Type: Word document

Recovery Source: PVCS

Source Contact Details: Alex Hanson CM

Required By: All SSC staff

Record Name: Back Up Procedures

Media Type: HTML Pages

Recovery Source: SSC Web site backup copies

Source Contact Details: SSC manager, SSC Senior technician

Required By: All SSC staff

Record Name: Department Contact List

Media Type: HTML Pages

Recovery Source: SSC Web site backup copies

Source Contact Details: SSC manager, SSC Senior technician

Required By: All SSC staff

Record Name: Known Error Log / OCP database

Media Type: HTML Pages

Recovery Source: SSC Web site backup copies

Source Contact Details: SSC manager, SSC Senior technician

Required By: All SSC staff

FUJ00232449

10.2.7 Critical Equipment

Listed below is information regarding the equipment that may be required following an incident.

Equipment Name:

Description: SSC Build PCs

Location: FEL01

Required By: All SSC staff who have moved to FEL01

Owner: SSC Manager

Quantity: 5

Requirements Over Time :Required 4 hrs after disaster declared

Equipment Name:

Description: SSC Web server / Powerhelp access PC

Location: FEL01

Required By: All SSC staff who have moved to FEL01

Owner: SSC Manager

Quantity: 1

Requirements Over Time :Required 4 hrs after disaster declared

Equipment Name:

Description: Access to Powerhelp

Location: FEL01

Required By: SSC Co-ordinator

Owner: SSC Manager

Quantity: 1 link

Requirements Over Time :Required 4 hrs after disaster declared

Equipment Name:

Description: Access to live system

Location: FEL01

Required By: SSC Diagnosticians

Owner: OSD

Quantity: 5 links to live system, with connectors available, firewall access

FUJ00232449

Requirements Over Time :Required 4 hrs after disaster declared.

10.2.8 SSC Back up Facilities at FEL01

The kit will be located in meeting room 6 - "D" block (M6).

Reception will be able to give directions and a swipe card that works for D block (normal cards will not work).

There will be 7 PC's set up there:-

SSCFEL01 - SSC workstation

SSCFEL02 - Webserver

SSCFEL03 - SSC workstation

SSCFEL04 - SSC workstation

SSCFEL05 - SSC workstation

SSCFEL06 - SSC workstation

SSCPublic - PinICL system.

Logon to the workstations using PWYDCS username and password. These are the same as BRA01 workstations except:-

1) The webserver is on the private network as well (http:\\223.94.9.12\SSCHome.htm).

When launching IE for the first time Microsoft will insist on using their wizard to setup internet access. Ignore it (select the option as already setup by SSC staff) and whenever it is necessary to access the web server just find the file c:\PathIE\pathway.htm and double click on it (it is possible to setup this file as the default page for IE). This file has links to the SSC web server and the Tivoli web server.

Other details

==========

IP address range:-

SSCFEL01 223.94.9.11

SSCFEL02 223.94.9.12

SSCFEL03 223.94.9.13

SSCFEL04 223.94.9.14

FUJ00232449

SSCFEL05 223.94.9.15

SSCFEL06 223.94.9.16

Netmask: 255.255.255.0

Gateway: 223.94.9.254

WINS: 223.64.1.73

WINS: 223.74.1.73

Private network is patched to point 21 in the meeting room.

OSD Service Management (e.g. Steve Gardiner or Ken Wood) can setup/remove this patch

SSCFEL01 and SSCFEL03 have administrator username/password as per all the SSC workstations.

SSCFEL02 administrator: SSC.2312

SSCPUBLIC administrator: SSC.2312

SSCPUBLIC 192.168.77.144

Netmask 255.255.255.0

Gateway 192.168.77.1

Public network is patched to point H10 in the meeting room.

FUJ00232449

11 Appendix D SSC PC Build Details

11.1 SSC workstation build eL

Hardware used: Base Fujitsu eL, PIII 500

128mb memory and 8mb Rage Pro graphics card.

11.1.1 Build process

1) Basic NT build using PIT products (see Initial products)

2) Add SSC products (see Additional products / customisation over PIT build)

At this point the disc image is ghosted off to \\SSCDIAG1\e$\ghost51c\images\wkseL01.gho

3) When building a new PC, the ghost image is downloaded using a DOS network load disc which connects to \\SSCDIAG1\ghost51c to run ghost. This is used to overwrite the system hard disc with the image wkseL01.gho.

4) Run various actions to finish build (see “At desk” action for SSC workstation build).

11.1.2 Initial products

Initially built with (PIT builds) :-

NTWKS40A_2_0_B008 (\\sscdiag1\packages\NTWKS40a)

Removed customisations Remposix.img and Isdn.img

(note after build, local admin password is PATHWAY)

Network card U/S after initial build.

copy Intel drivers from Fujitsu CD-ROM (\drivers\network\intel) to floppy disc

Install pro+ network card from a:\

SSC_WKS_2_0_B001 (\\sscdiag1\packages\ssc_wks_2_0_B001)

Map Y: to \\SSCDIAG1\E$ before calling _INSTALL.bat

FUJ00232449

11.1.3 Additional products / customisation over PIT build

1) Rename "My Computer" to SSCBRA00

2) Install Mach 64 VT-B driver

Increase desktop to 1024x768

65536 Colours

70 Hertz

3) Remove "My Briefcase" from Desktop

4) Install pkzip 2.04g to c:\zip

5) CD-Rom drive letter changed to I:

Shortcut added to AllUsers\Desktop

6) Winzip 6.3 installed to c:\Program Files\winzip

Installed with "classic" interface.

Shortcut added to AllUsers\Desktop

7) Textpad 3.2.5 installed to c:\Program Files\textpad

Associated .txt documents with textpad

Shortcut added to AllUsers\Desktop

8) Installed wingrep 2.0 to c:\Program Files\wingrep

Updated to 2.1

Shortcut added to AllUsers\Desktop

9) Message store utility (1.0) installed

to c:\Program Files\Message Store Utility then upgraded

to 2.2 (see 16 below)

Shortcut added to AllUsers\Desktop

10) rclient.exe copied to c:\winnt

Command prompt changed to red text on black and 500 line buffer

11) Installed Exceed 6.1 with the following custom options

Allow all users of machine to see installation

install to c:\Program Files\exceed.nt

user directory c:\Program Files\exceed.nt\user

install

All Xserver related components

HWM

Host explorer

FUJ00232449

FTP for windows explorer

No registration
No Xserver password
Traceroute
Xsession, Xstart
Customise

Telnet profiles generated for BVNW01 and Livetest
X set to single window (800x700)
New xrdb.txt (increse size of xterm, add scroll bars)
Add c:\Program FIles\exceed.nt\hwm.exe to exceed toolbar
Generate wstart (xsession) file to start exceed and
hwm (sscwks.ses)
Shortcut to sscwks.ses placed on AllUsers\desktop
Shortcut to telnet placed on AllUsers\desktop
Shortcut to HWM placed on AllUsers\desktop

12) Install IE4.01
Standard install - no desktop change
Delete outlook express from desktop
Create C:\PathIE
Copy Pathway.gif and pathway.htm to C:\PathIE
Launch IE - Select "already have connection" in wizard(sic)
Change default home page to C:\PathIE\pathway.htm
Move Internet explorer program group to all users
Amend HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet Explorer\
Main\Default_Page_URL to "C:\PathIE\pathway.htm"

13) Install Excel 97, Access 97, Word 97
Delete "setup for IE3.02" from desktop"
Install Office SR-1
Remove "office startup" from allusers\startmenu\programs\startup
Install value pack (text data access drivers)

FUJ00232449

Shortcut to Word, Access, Excel placed on AllUsers\desktop

14) Formatted file utility installed to c:\Program Files\ffutil
All current definition files copied to
c:\Program Files\ffutil\Definition Files
Shortcut moved to "all users"

15) NT Posix utilites copied to c:\posix
c:\posix added to system %PATH%

16) Added JSim archive viewer to system.
This was mainly in an attempt to get v2.2 of the
message store utility going, because this install
loads every ocx under the sun! And it worked.

17) Shortcuts added to desktop
eventvwr.exe
textpad.exe
notepad shortcut to lmhosts (\\PBOPWYDCS01\nameres\lmhosts)
shortcut to floppy drive
shortcut to C:\ drive

NOTE: Ensure all desktop shortcuts are in "AllUsers" desktop

18) Setup Crystal Audit drivers

19) Tivoli desktop software v3.1.4
Installed to c:\tivoli\desktop
Shortcut created to "c:\tivoli\desktop\tivoli.exe -port 8002" on desktop
Hosts file amended to include "223.64.1.147 WMASTER001 WSYSMASTER001"
When the desktop is launched - logon to WMASTER001
Login name must be PWYDCS\xxxxx01 (uppercase PWYDCS)

20) Quick view plus 5.0 Installed along with Adobe Acrobat 3.01

FUJ00232449

Shortcut added to "AllUsers" desktop for both.

21) C:\AgentEvents added. install.cmd run. See readme.txt

22) Installed LT1_WP_3941 for RQueryUK
Failed to install because msvbvm50.dll not present.
Copied from old workstation and registered. Install runs OK.
copied ripostesetup.bat to rtools
copied _sleep.exe to c:\
copied riposte licence file to c:\rtools
Riposte now runs up OK on licence 13 (supplied with WP3941)

rqueryuk fails to run up.

Copied Cir server rtools to workstation
Re-installed Riposte on update17
Riposte service disabled at startup.

23) Added directory c:\Pwayzip with Pwayzip.exe

24) Added NR2 hosts and lmhosts files:-
c:\winnt\sytem32\drivers\etc\nr2hosts.txt - hosts
c:\winnt\sytem32\drivers\etc\nr2masterlmhosts.txt - master lmhosts

copied nr2clientlmhosts to lmhosts
copied nr2hosts to hosts

25) Installed Visual studio 6 enterprise
Setup forced install of IE4.01
Custom install - VB, VC++ and tools only
This immediately fixed all problems loading RQueryUK etc
(figures - it loads just about every dll/ocx under the sun!).
Installed MSDN July 99

26) Shortcut to RQueryUK.exe and Rclient.exe added to desktop

FUJ00232449

27) netuse.txt amended and copied to desktop

28) Amend SecureNT_Install_Groups_And_Users.cmd
at the end of section :LOCALPWYDCS add:-

NET LOCALGROUP "Administrators" "PWYDCS\SSC Apps MAN" /ADD

11.1.4 "At desk" action for SSC workstation build.

The SSC workstations are initially built by loading a ghost image of the basic system. This document details the actions required to complete the build when the PC has been connected to the "red" (live system) LAN.

Parts of this procedure requires administrator access to the PYWDCS domain.

The local administrator password on this workstation build is PATHWAY

When restoring the ghost image, change size of the C partition to 3960

Required actions

1) Create D drive

On first boot, run up disc administrator. Create partition in spare space and format as D: (volume label DATA).

2) Change SID and system name

Login as local administrator

Use NewSID to amend the workstation SID and system name:-

Newsid /a SSCBRAxx

Amend Desktop shortcut "SSCBRA00" to new workstation name.

FUJ00232449

2a) Install Windows NT SP5

Install office SP2

3) Add workstation to the PWYDCS domain

Under Control Panel / Network / Protocol change IP address and Gateway address for TCP/IP

Gateway = 223.94.28.254

WINS = 223.64.1.73 223.74.1.73

Under Control Panel / Network / Identification

Change domain SSCBRA01 to domain PWYDCS

System should be restarted after these changes

4) *Installing the NT Security*

- Log on as Domain Administrator. (Domain PWYDCS, PDC = PBOPWYDCS01 - 223.74.2.66)
- Locate and open the Secure NT folder in the root of C
- Run the _Install_Secure_NT_Workstation.cmd
- Follow the on screen prompts. When asked to select if the system is for Live or Test, select "L" for live.
- Installation will now complete.

Note…

The "_Install_Secure_NT_Workstation.cmd" file MUST be run again after the Trusts are set up in the PDC.

5) Add domain user to local administrators group

a) PC's used in BRA01 - The PWYDCS domain user name for the person using this PC should be added to the local administrators group, e.g.

NET LOCALGROUP "Administrators" "PWYDCS\spark01" /ADD

b) PC's used in FEL01 - Because these PC's are not specifically allocated to any one person it is necessary to add SSC Apps SUP to the administrator group e.g.

NET LOCALGROUP "Administrators" "PWYDCS\SSC Apps SUP" /ADD

6) Changing the Administrator Account Name and Password

- Start "User Manager " from the Start Menu

FUJ00232449

- From the "UserName" list, select the Administrator Account by double-clicking it.
- On the "User Properties" window enter the new Password (**Ssc.Wks.0604**) and Confirm-Password
- On the "User Properties" window blank out the Description text box
- Click the "OK" button to save the changes
- With the "Administrator" Account still highlighted, select the menu option "User", "Rename"
- On the "Rename" window enter the new Account Name (**sscdeaduser**)
- Click the "OK" button to save the change
- Close "User Manager"

7) Implementing BIOS Level Security

Reboot system.

At the prompt, press F2 to enter setup

- Move the Floppy Drive or Drives below the hard drive in the boot Sequence in the boot menu
- Remove the CD ROM Drive (if fitted) from the Boot Sequence in the boot menu
- Set the Supervisor Password to **ssc1bios** in the Security menu
- Set the “User setup access” to “Limited access”
- Save the new BIOS Settings
- Exit the BIOS Settings Menu
- Reboot the machine if required

8) First user logon

Logon as the PWYDCS\username

a) Internet explorer will insist on putting up its splash screen for two logons. On the second logon, click the option to turn it off!

Launch IE. Tell the “wizard” (sic) that you already have an internet connection.

IE will then revert to using the microsoft site as the default (again despite registry changes in the build). Set default to c:\PathIE\pathway.htm.

FUJ00232449

b) Mouseware will insist in re-setting up the mouse (despite the fact it has already been done in the build!).

Click YES

Click next

Select appropriate side for mouse position (watch out for left handers!)

Click next

Click next

Click Finish

c) Setup printer access to SSCBRAP

d) Reset options for cmd prompt. Red text, 500 line buffer.

STOP HERE - SecureID on NT not required yet.

9) Instructions For Configuring ACE/Agents SecureID

1. Copying the ACE/Server configuration files to the target Machine

- Collect the following files from the ACE/Server Administrator

  SDCONF.REC and SERVER.CER for standard builds, along with SERVER.KEY for the Remote Admin Workstation.

- Place these files in C:\WINNT\SYSTEM32.
- Place the IP address of the ACE/Server in the following location on the target machine: C:\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS
  BTLFENT01 - 223.74.1.250

2. Enabling SecureID strong authentication in the Control Panel

- Open Control Panel and select the ACE/Agent applet
- Enable the following :
- Local Access Security
- Challenge All Users
- Enable Screen Saver Security
- Enable Reserve Password, supplying a Password of **Ace.Ssc.0603** in the process.