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Incident Management Process Guide
Preface

This document describes the Incident Management process. This process is the fundamental process used by Techelp in the provision of technology support to the XXXXXX Business Partners.

This document was developed as part of the STS Systems Management Initiative of Help Desk Process Design.

The term Help Desk is used as a generic term throughout this document to facilitate understanding of it’s readers as it is, currently, the most common term for describing this function.

How This Document is Organized

This document is divided into five chapters and three appendices.

Chapter 1, ‘Introduction’, provides an introduction and explains the mission and objectives for the Incident Management process.

Chapter 2, ‘Incident Management Relation to Other Processes’ documents the scope of the process by explaining the relation of problems to incidents, alerts and changes.

Chapter 3, ‘The Incident Management Process’, describes the overall process and the activities making up the process. Each activity is described in terms of general description, inputs, outputs, controls, objectives, tasks and measurements.

Chapter 4, ‘Roles and Responsibilities’, describes the roles applicable to the Incident Management process, the responsibilities for each role, and the skill requirements for the role.

Chapter 5, ‘Tools Requirements’ describes the generic tools and tool functions that apply to the activities of the process.

Appendix A, ‘Incident Management Standards and Control Elements’, provides an overview of the most important control elements and standards used by the Incident Management process, such as: severity, priority, and category codes.

Appendix B, ‘Reporting by the Incident Management Process’ gives an example of reports that can be created for review by the Incident Management process.

Appendix C, ‘Meetings of the Incident Management Process’ provides the purpose, agenda, participants of the meetings that have been designed as part of the process.

Related Documentation

The reader of this document should have knowledge about the following documentation:

- Problem Support Process (an operational support process of the “Help Desk” model)
• Customer Satisfaction Management Process (a management support process of the “Help Desk” model)

• Communications Management Process (a management support process of the “Help Desk” model)

• Manage Problems Process

• Plan, Administer and Implement Changes

An overview of the Problem Support, Customer Satisfaction and Communication Management processes are included in Appendix D of this process guide.
1 Introduction

Incident Management is the keystone operational process of the processes that make up the “Best Practices” Helpdesk model.(shown in Figure 1). It encompasses all contacts to Techelp by the Business Partners and provides the primary Business Partner interface into STS.

The Incident Management process is responsible for: resolving customer problems; routing unresolved incidents to the appropriate group, under the guidelines of the Manage Problems process and ensuring other service requests are either resolved by Techelp or passed along to the appropriate support group.

Incident Management is supported by the following processes included in the scope of this project:

- Problem Support
- Communication Management
- Customer Satisfaction Management

Figure 1: Help Desk Model

From a Help Desk perspective, Incident Management and Problem Support are considered to be operational processes whereas the other six processes depicted in the “Best Practices” model are supporting management processes.

The following definition of terms are provided for clarity:

Techelp: The organizational group i.e. 12 Consultants and Team Leader

Help Desk Process: The process(es) executed by Techelp in support of their clients

The purpose of this process is to provide the primary support interface between the client and the provider of IT and:
• to deliver that support when to do so is within the scope of this process
• or to manage its delivery when the support need is assigned to another IT process.

The importance of this process is that it provides a consistent means by which clients and providers of IT can communicate questions, problems, requests, or concerns.

Service Desk: The organization that includes the following Teams:

• Techelp
• WTT
• Tecadmin
• Ottawats
• Knowledge Management

Techelp Mission: To leverage XXXXX’s investment in Technology by providing World Class customer service that delights our business partners

1.1 Mission and Objectives of Incident Management

The mission of Incident Management is to handle all requests for STS service & support in a consistent, timely, polite and cost-effective manner

• To ensure client satisfaction with the quality of support
• To handle all types of client requests for service and support
• To use common processes and tools for providing customer support that provide:
  ▶ Usability and responsiveness to enable quick call entry
  ▶ Measurements to understand workload
  ▶ Maintenance or improvement of current customer service provided

1.2 Scope of the Incident Management Process

The process begins with a request from a client or with the statement of a problem or concern of the client. It ends with the client being satisfied with the response given

The scope of the process includes:

• All technology services offered by STS
• Hardware, software and procedures used to deliver the STS services

Not included in the process are

• The management of the problem
• The analysis needed to establish requirements
• The analysis needed to detail the required solution to a problem
• The delivery of information technology services
For a more detailed discussion of the relation of Incident Management to the handling of problems and changes, please see Section 2.

1.3 Goals of the Incident Management Process

The goals of this process are:

To establish clear lines of communications with the client and with any providers of service
To ensure the delivery of quality support services to the client:

1. Guiding Principles for the Incident Management Process

The following guiding principles govern this process:

- Techelp is the single-point-of-contact for service, support and requests for STS related matters

- A Tier 2 & 3 support group (e.g. Technical Support or Vendors) may contact the business partner for further problem clarification, but should not directly take Client Incidents

- Realistic service level targets, satisfying business needs, will be set and reviewed on a regular basis for attainment. The result will be published Service Level Agreements between the Client community and the Support Desk for each type of support. (In most cases, a set of Service Level targets will be established first. Once these Service Level targets can be attained in a consistent manner, they can become the basis for Service Level Agreements).

- Techelp has the responsibility for logging all client contacts into the Incident Management system, tracking them, and ensuring that they are handled and closed or handed off according to the pre-defined criteria.

- No Incident initiated through Techelp is closed until client concurrence is reached.

- Techelp Consultants will have the necessary documentation from all of the support and application groups to resolve incident within their areas of responsibility.

- Vendors and other service providers who have been assigned actions by Techelp and who do not have access to the Incident / Problem Management systems, are required to communicate progress by a pre-defined alternative means.

- As soon as a multi-user problem is identified, all Techelp Consultants must be notified so that incoming Incidents related to the outage can be attached to the appropriate record.

- Techelp must be represented in the change management process.

- Techelp will have and maintain documented support matrices that define where to assign incidents and what response criteria to expect.
• All support groups will establish Documents of Understanding (DOU: internal Service Level Objectives) with Techelp to define response criteria and escalation procedures.

• There will be only one problem, question, request, etc. in each ticket, even if this means that one client contact generates several tickets.

• All actions taken to resolve an incident will be logged in a consistent manner

1.4 Benefits and Value of the Incident Management Process

When the process as designed in this document is implemented, the following are the anticipated benefits for STS:

Improved client call resolution through consistent handling of their requests for service

Improved client understanding of the services offered by Techelp and their related service level commitments

Improved Techelp services, through an improved knowledge base, which will be extended to all environments (problem types)

The establishment of the foundation required for the provision of a single point of contact for all of the business partner’s IT needs

Improved and consistent reporting to facilitate improved analysis of trends and continuous improvement of the process

Improved service through interfaces with event monitoring, which will enable the capability to be more proactive and reduce the number of calls to Techelp
Incident Management Relation to Other Processes

This section is intended to assist in positioning this process with other closely related processes. In particular the relation to Manage Problems, automation tools used in the Sustain Service Delivery process, and the processes to Plan, Administer and Implement Changes is explained.

Relation of Incidents to Problems:
Many types of calls are handled by those responsible for handling the primary interface to customers of STS services. Among these calls are incidents, which are calls based on service issues. The life of an incident includes Incident reception, classification, logging, initial impact analysis, urgency assessment, resolution and closure. Should an incident not be able to be quickly resolved (the current rule is within 15 minutes), or if the involvement of additional levels of support beyond the first level are required, then an incident becomes a problem.

Relation of Incident Management to Sustain Service Delivery:
Proactive forwarding of alerts from the Sustain Service Delivery process to Techelp, will facilitate the reduction of calls to Techelp during widespread service disruptions through the use of telephony technology. It will also improve efficiencies in the incident management process by enabling a faster correlation of incidents to a known/existing problem.

Relation of Incident Management process to Change Management:
When the solution to a problem is discovered, the implementation of such a solution to a problem is considered a change. The Incident Management process is concerned with the timing and result of the change implementation. Thus, a closed change could result in closing the related problem, which in turn could result in closing the related incident to the Level 1 by a customer of STS services.

![Diagram of incident, problem, fix, change, and change management]

Also, when an incident requires a change request to be created (for example, the distribution of software to a client), the successful completion of the change (closed changed) will result in the closure of the related incident.
The process integration between Incident Management, Manage Problems and Change Management is shown in the following figure.
Incident Management

- Record all contacts
- Incident Notification?
  - Yes
  - Record resolution
  - Close contact with customer concurrence
  - Validate Installation / Configuration
- Incident Resolution Known?
  - Yes
  - Record resolution
  - Create service request
  - Enter Change Request
  - Assess and approve request
  - Order and receive requested software / hardware
  - Enter in Asset Management databases
  - Schedule installation
  - Enter service request
  - Validate Installation / Configuration
  - Validate Change
  - Execute, distribute, and install change
- No
  - Create problem record, assign severity, and route problem
  - Update knowledge databases
  - Schedule, assess, and approve change
  - Enter change request
  - Schedule installation
  - Enter in Asset Management databases
  - Validate Change
  - Back-out Change
  - Change Management

Problem Support

- Close contact with customer concurrence
- Create service request
- Enter Change Request
- Assess and approve request
- Order and receive requested software / hardware
- Enter in Asset Management databases
- Validate Installation / Configuration
- Validate Change
- Execute, distribute, and install change

Manage Problems

- Receive problem record, identify problem
- Record resolution, Close problem
- Receive problem record, resolve and record problem resolution
- No
- Yes
- Resolved?
- Record problem resolution
- Close problem
- Receive problem record, assign severity, and route problem
- Update knowledge databases
- Create change request, if necessary
- Validate change
- Verify service request
- Verify service request
- Levels 2 and 3
- Other Services
- SLA
- Customers
The Incident Management Process

Process Flow

Incident Management Process Flow

1.0 Initialization/Shutdown

1.1 Receive Client Contact

1.2 Open Incident Record/Identify Client

1.3 Identify Incident Profile

1.4 Record Incident

1.5 Resolve Contact or Route Problem/Change Request

1.6 Advise Client of Status

1.7 Close Contact

1.8 Track, Trend & Report Contacts

1.9 Update Knowledge Base

To Problem Support 2.1

Change Management

From Problem Support 2.7

From Problem Support 2.8
Process Activity Descriptions

A short description of each of the ten activities is given below (Initialization and shutdown is outside the scope of the Incident Management process but is a prerequisite for it and is listed here for clarity).

**Initialization/Shutdown**

This is the activity that enables the Techelp consultant to be ready to receive calls at the beginning of the day (BOD) and to disconnect from the Incident Management process at the end of the day (EOD).

**Receive Client Contact**

A client is anyone who contacts Level 1 by any means. The person accepting the contact accepts ownership and responsibility for the contact and is known throughout the Incident Management process as the *Incident Owner*.

**Open Incident Record/Identify Client**

The Incident Owner opens a new or existing Incident Record. This record is the repository for information about the contact throughout its existence. The Incident Owner validates key information, based on the Caller’s employee identification number, during this dialogue with the Client. The relevant history data of the client should also be viewed at this time.

**Identify Incident Profile**

The type of contact is determined to facilitate the classification of Incident Record types.

**Record Contact**

After the Incident Owner has identified and validated the Client information, the contact is documented. The incident is assigned a severity and priority and the Incident Owner is responsible for complete and detailed documentation of the work history.

**Resolve Contact or Route Problem/Change Request**

The Incident Owner determines if the contact/Incident can be resolved at Level 1 or whether it must become a problem and/or change request. The resolution is recorded, whether it be from Level 1 or Level 2.

If the Incident Owner identifies that a problem exists, then the Problem Support process is invoked to handle the transfer. If a change needs to be initiated, this may also be done by the Incident Owner. In either case the Incident Owner handles the transfer to the appropriate support group.
Advise Client of Status

Throughout the Incident Management process, the Incident Owner, as the Client advocate, communicates with the Client. The Incident Owner monitors open contacts for which they are responsible and advises Clients of status as defined in the Service Level Objectives, or as requested by the Client.

Close Contact

After an incident is resolved, the Incident Owner contacts the Client to ensure that the resolution meets their expectations. If the Client is satisfied with the resolution, the Incident Owner closes the incident record. If the Client is dissatisfied with the resolution, the Incident Owner will update the problem record status according to pre-defined procedures (refer to Manage Problems process) and route the problem to the appropriate level of support.

Identify Incident Profile

The type of contact is determined to facilitate the classification of Incident Record types.

Track, Trend and Report Contacts

This activity is where the compilation of the statistics and trends is performed and reports are produced for both management and Clients. The performance measurements help Level 1 support to continually improve service to the clients, plan workload and show conformance to Service Level Objectives and Service Level attainment.

Update Knowledge Base

This process is part of the Manage problems process and whilst the Knowledge Management Team is responsible for the creation of the known fixes, the Incident Owner is responsible to provide feedback, suggestions etc. on known errors they have used or create an edit request for those solutions requiring modification or enhancement,
3.1 1.0 Initialization/Shutdown

This activity may be considered to be outside of the Incident Management process as it is defined, but is part of the Techelp staff startup and shutdown activity.

The following diagram summarizes the activity:

![Diagram showing the Initialization/Shutdown process]

Objectives

- Establish the environment for the execution of the Incident Management Process.

Tasks

- Start/stop support systems
- Login/Logoff to ACD
- Check system outage emails
- Check "whiteboard", "hotnews"
- Check open tickets
- Check with Data Centre, other user, support groups

Measurements

- Availability of consultant
Inputs

- System status information
- Other IT Groups Identified Problems such as Adhelp and SFTS
- Automation - Problems discovered and logged automatically by monitoring tools
- Recent Change Information - Information or changes that have been made recently which may assist in identifying problem

Outputs

- Consultant in ready status – ready to start incident management process

Controls

- Service Level Commitments
- Workload management
- STS Procedures and Policies
3.2 1.1 Receive Client Contact

Contacts may come from a variety of sources and will be from both the user community (Business Partners) as well as internal IT organizations.

The following diagram summarizes the activity:

**Objectives**

- Acknowledge client contacts

**Tasks**

- Greet the client
- Answer email or voicemail
- Validate client personal data

**Measurements**

- Responsiveness of Level 1 staff
Inputs

- Client contact (numerous sources)
- Client information database (Symon)

Outputs

- Acknowledged contact
- Validated client personal information

Controls

- Service Level Commitments
- STS policies & procedures
3.3 1.2 Open Incident Record/Identify Client

The Techelp consultant opens a new or existing record and validates the client’s personal data.

The following diagram summarizes the activity:

Objectives

- Record all contacts in incident management system

Tasks

- Check client’s incident history
- Verify client’s personal data
- Log client information
- Record incident source

Measurements

- Percentage of logged incidents to ACD calls
- Incident sources as a percentage of total

Inputs

- Client data

Incident Management Process Description
- Source of contact data

**Outputs**
- Open incident
- Verified client data

**Controls**
- Service Level Commitments
- STS policies & procedures
3.4 1.3 Identify Incident Profile

This activity identifies the type of incident and executes the appropriate procedure. It enables the workload management process and the integration of other incident types as the Single Point of Contact (SPOC) strategy.

The following diagram summarizes the activity:

![Diagram showing the process of identifying incident profile]

Objectives

- Identify type of incident
- Accommodate future SPOC requirements

Tasks

- Determine incident type
- Identify related procedure based on type

Measurements

- Types of incidents as a percentage of total
Inputs

- Client data
- Incident source data
- Client history data

Outputs

- Identified incident type

Controls

- Service Level Commitments
- STS policies & procedures
3.5 1.4 Record Contact Information

After the Incident Owner has identified and validated the client information and the basic data elements (source of incident, type of incident etc), the contact is documented. Through conversation with the client, the contact issue is recorded and the severity and priority assigned by the incident owner.

The following diagram summarizes the activity:

![Diagram](image)

Objectives

- Capture all pertinent incident information
- Identify resolution ownership

Tasks

- Record all data directly into the logging tool (against the client id experiencing the issue)
- Document all actions taken in the work history
- Search for known errors
- Identify root cause using system support/diagnostic tools

Inputs

- Open incident with basic information (client data, type, source etc.)
• Client feedback
• System status information

**Outputs**

• Identified resolution
• Accurate incident data and actions taken
• Incident to be transferred to another support

**Controls**

• Service Level Commitments
• STS policies & procedures
3.6  1.5 Resolve Contact or Route Problem/Change Request

The incident is either resolved or routed to the appropriate support area. The problem is routed via the Problem Support process and the change request is created directly from the incident data. In each case, there is a cross-reference between the problem/change record and the incident (forward and backward).

The following diagram summarizes the activity:

Objectives

- Correct incident handling

Tasks

- Apply identified solution
- Verify solution worked
- If solution failed, edit request solution for knowledge management team
- Create a problem ticket
- Create a change request
- Set client’s expectations, if unresolved, based on severity and priority
Inputs

- Identified solution
- Unresolved incident
- Incident requiring a change request

Outputs

- Documented resolved incident
- Updated incident record referencing problem or change
- Created problem
- Created change (or service request)

Controls

- Service Level Commitments
- STS policies & procedures
3.7 1.6 Advise Client of Status

The Incident Owner monitors open contacts they own and advises clients as defined in the Service Level Objectives.

The following diagram summarizes the activity:

```
* Generally from organizations that do not participate in the process.
  i.e. have no access to the common tools used by the process
```

**Objectives**

- Effective communication of status

**Tasks**

- Perform status check of open problems
- Update priority if required
- Advise problem resolution owner
- Cross reference incident to problem, if new incident
- Receive problem resolution (for existing incident)
- Advise client and gain concurrence that it is resolved
- Close the incident
- If client concurrence is not gained for the problem resolution, re-open the problem record
- Increase the priority
• Update work history
• Transfer to resolving group

**Inputs**

• Open incident
• Open problem
• Problem resolution notification
• Pre-defined alternative incident (e.g. BST, Vendor)
• Completed change notification

**Outputs**

• Updated problem record
• Updated incident record
• Closed incident
• Reactivated problem

**Controls**

• Service Level Commitments
• STS policies & procedures
3.8  1.7 Close Contact

After client agrees that the incident has been satisfactorily resolved, the incident is closed and the contact with the client terminated.

The following diagram summarizes the activity:

![Diagram showing the close contact process]

Objectives

- Completion of the incident management process
- Customer satisfaction with incident management process

Tasks

- End contact dialogue

Inputs

- Incident status

Outputs

- Closed contact
Controls

- Service Level Commitments
- STS policies & procedures
3.9 1.8 Track, Trend and Report Contacts

This activity provides the required management information to demonstrate service level attainment and to enable continuous process improvement.

The following diagram summarizes the activity:

![Diagram of Track, Trend and Report Contacts]

Objectives

- Process effectiveness and efficiency
- Continuous improvement
- Demonstrate service level attainment
- Facilitate workload management
- Facilitate skills management
- Facilitate human resource management
- Demonstrate effectiveness of communication management process
- Identify customer satisfaction opportunities

Tasks

- Define reporting requirements and practices
- Data analysis
- Generate action plans for improvement and enhancement of the process
- Produce Support report card (DOU results/attainment)
**Inputs**

- Incident management data
- Client requests
- Vendor management
- Management requests

**Outputs**

- Trends
- Reports
- Process improvement initiatives

**Controls**

- Service Level Commitments
- STS policies & procedures
4 Roles and Responsibilities

A number of roles have been defined for the Incident Management process. Roles must not be confused with a function or job within the organization. A function or job consists of roles, such as support manager or an operations employee. Roles describe the tasks that the person (function) has to perform. An employee involved in the Incident Management process can have a number of roles assigned that are part of the Incident Management process, but may also have roles that belong to another process, the Change Management process, for example. For the Incident Management process the following roles have been defined:

- LVL1 Level 1 Support
- IMC Incident Management Coordinator
- IMSO Incident Management Service Owner
- IMPO Incident Management Process Owner
- IO Incident Owner
- IMTL Incident Management Team Leader
- KE Knowledge Engineer
- RW Report Writer

The following matrix describes the responsibilities of the roles, by illustrating the activities of the process that each of the roles are involved in - either executing, supply input to, or using the output.
### Roles

<table>
<thead>
<tr>
<th>Activity</th>
<th>LVL1</th>
<th>IMC</th>
<th>IMPO</th>
<th>IMSO</th>
<th>IO</th>
<th>RW</th>
<th>KE</th>
<th>IMTL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Initialization/Shutdown

- Start/stop support systems
- Login/Logoff to ACD
- Check system outage emails
- Check “whiteboard”, “hotnews”
- Check open tickets
- Check with Data Centre, other user support groups

#### Receive Client Contact

- Greet the client
- Answer email or voicemail
- Validate client personal data

#### Open Incident/Identify Client

- Check client’s incident history
- Verify client’s personal data
- Log client information
- Record incident source

#### Identify Incident Profile

- Determine incident type
- Identify related procedure based on type

#### Record Contact Information

- Record all data directly into the logging tool (against the client id experiencing the issue)
- Document all actions taken in the work history
| Incident Management Process Description Page 39 |
| Search for known errors | ✓ |
| Identify root cause using system support/diagnostic tools | ✓ |
| **Resolve Contact, Route Problem or Change Request** | |
| Apply identified solution | ✓ | ✓ | ✓ |
| Close incident if solution worked | ✓ | ✓ |
| If solution failed, edit request solution for knowledge management team | ✓ | ✓ | ✓ |
| Create a problem ticket | ✓ | ✓ | ✓ | ✓ |
| Create a change request | ✓ | ✓ | ✓ |
| Set client’s expectations, if unresolved, based on severity and priority | ✓ | ✓ |
| Complete contact | ✓ | ✓ | ✓ |
| **Advise Client of Status** | |
| Perform status check of open problems | ✓ | ✓ | ✓ |
| Update priority if required | ✓ | ✓ | ✓ |
| Advise problem resolution owner | ✓ | ✓ | ✓ |
| Cross reference incident to problem, if new incident | ✓ | ✓ | ✓ |
| Receive problem resolution (for existing incident) | ✓ | ✓ | ✓ |
| Advise client and gain concurrence that it is resolved | ✓ | ✓ | ✓ |
| Close the incident | ✓ | ✓ | ✓ | ✓ | ✓ |
| If client concurrence is not gained for the problem resolution, re-open the problem record | ✓ | ✓ | ✓ |
| Increase the priority | ✓ | ✓ | ✓ | ✓ | ✓ |
| **Close Contact** | |
| Close incident record | ✓ | ✓ | ✓ | ✓ |
| End contact dialogue | ✓ | ✓ | ✓ | ✓ |
4.1 Level 1

This role is responsible for receiving information about problems and capturing the pertinent information for problem diagnosis. Currently this role exists in multiple STS organizational units. The documentation of this role does not include considerations for SFTS or ADhelp. This role provides the primary point of contact between STS and the problem reporter.

Key requirements include:

- General skills and knowledge of STS deployed hardware/software/services
- Basic networking computing skills
- Analytical skills required to resolve incidents
- Ability to identify problems and note trends
- Customer relationship and communications skills
- Knowledge of STS Service Level Agreements

Key responsibilities include:

- Single point of contact for clients across all appropriate communication media
- Owns the customer’s incident
- Maintains accurate records of all contacts to Techelp
- Resolution of all requests as per Techelp targets (i.e. incidents = 80% first Incident resolution)
- Routes unresolved contacts to the appropriate area
- Tracks incidents for which they are identified as the owner
- Updates clients of incident status as requested or as specified in the Service Level Objectives
• Proactive client communication in the areas of potential problems, issues, new services and customer surveys for assigned Business Partner groups
• Acts as the customer advocate
• Contribute to process improvement initiatives
• Knowledge of STS Service Level Agreements

### 4.2 Incident Management Coordinator

The Incident Management Process Coordinator oversees the day to day operation of the Incident Management process. This role is responsible for the management of the flow of all client requests to the Incident Management process with the goal of ensuring resolution of all contacts in a timely manner. The role may involve coordination of cross-domain resources to enable the resolution as well as providing the single focal point for all information regarding the interaction with other management processes: Manage Problems; Change Management; Service Requests

**Key requirements include:**

• General skills and knowledge of IS deployed hardware/software/services
• Overall technical knowledge of services offered by IS
• Analytical skills
• Problem solving skills
• Demonstrates initiative
• Knowledge of process modeling techniques and the ways to measure process effectiveness and efficiency
• Basic technical knowledge about the products (hardware, infrastructure, protocols, etc.) that are used to provide services to customers
• Leadership skills in stressful situations
• Communications skills
• The management of crisis or severity 1 problems

**Key responsibilities include:**

• Overall responsibility for the day to day management and coordination of the Incident Management team
• Ensures compliance to process standards and working practices
• Escalates exceptions to Incident Management process as appropriate
• Manages internal improvement projects to implement new technology and process improvement ensuring compatibility and integration with the whole support supply chain

• Consolidates and prioritizes Incident Management improvement ideas

• Tracks incidents for which they are identified as the owner

• Updates clients of incident status as requested or as specified in the Service Level Objectives

• Proactive client communication in the areas of potential problems, issues, new services and customer surveys for assigned Business Partner groups

• Acts as the customer advocate

• Contribute to process improvement initiatives

• Knowledge of STS Service Level Agreements

---

### 4.3 Service Owner

Service owners ensure that the Incident Management process is being used effectively as problems are assigned that relate to their service. Thus they are key representatives of their area, or of the service that their area delivers. As well, this role is the focal point for all information and direction during the restoration of services. The focus of the role is to ensure that the services required by the users of STS technology are effectively delivered through the Incident Management process.

**Key requirements include:**

• General skills and knowledge of IS deployed hardware/software/services

• Overall technical knowledge of services offered by STS

• Analytical skills

• Escalation skills to bring proper resources to bear on the recovery effort

• Knowledge of STS Service Level Agreements

• Leadership skills in stressful situations

• General testing and validation skills

• Problem solving skills

• Communications skills

**Key responsibilities include:**

• Effective delivery of the “Help Desk “ services

• Identification of new opportunities to improve service and support to the Business Partners
- Responsible for Business Partner satisfaction with the “Help Desk” services provided
- Knowledge of STS Service Level Agreements

4.4 Incident Management Process Owner

This is a key role for cross-domain process effectiveness. The process owner is the manager who has responsibility and authority for the overall process results. It is a cross-functional role taken on in addition to normal functional management responsibility.

Often the role is assigned to the manager with the most to gain or lose by the success of the process, or the manager whose functional responsibilities include most of the critical success factors for this process.

Key requirements include:

- People management skills
- Leadership
- Credibility
- Authority/clout

4.5 Incident Owner

This role is responsible for ensuring a resolution to the client’s contact is found and implemented according to the criteria of the process. The role may involve coordination of cross domain resources to enable the resolution.

Key requirements include:

- General skills and knowledge of IS deployed hardware/software/services
- Overall technical knowledge of services offered by STS
- Analytical skills
- Knowledge of STS Service Level Commitments
- Problem solving skills

Key responsibilities include:

- Ownership of the incident throughout its lifecycle.
- Providing client status updates as defined in the service level objectives
- Responsible for escalation of incidents exceeding criteria (on an exception basis) or as requested by the client
4.6 Incident Management Team Leader

The Incident Management Team Leader coordinates and manages the “Help Desk” team and all related team activities, ensuring that workload and priorities are managed in order to deliver high quality and efficient service to the Business Partners.

Key requirements include:

- General skills and knowledge of IS deployed hardware/software/services
- Overall technical knowledge of services offered by IS
- Analytical skills
- Problem solving skills
- Personnel management skills
- Basic technical knowledge about the products (hardware, infrastructure, protocols, etc.) that are used to provide services to customers
- Leadership skills in stressful situations
- Communications skills

Key responsibilities include:

- Manages day to day team workload
- Defines training and development needs for individuals within the team
- Undertakes performance reviews with team members in compliance with XXXXX policy
- Ensures appropriate action taken as a result of service degradation
- Provides first line escalation point for customer service
- Provides direction to improve the operation and effectiveness of the team and supports improvement ideas as appropriate
- Attends appropriate management service level support reviews with other internal support areas and external service providers
- Resolves cross-functional issues that impact the operation of the team

4.7 Knowledge Engineer

The Knowledge Engineer supports the Incident Management process and is in particular accountable for the integrity of the knowledge database. The position is a composite of editor, publisher, analyst, consultant and project manager and must combine subject matter expertise from across the various IT specialty areas. Included also is the mentoring of other STS personnel in building their knowledge databases. Responsibilities include:

- Identifying knowledge databases
• Ensuring that existing items are continuously enhanced
• Facilitates and co-ordinates content by ensuring second and third level Specialists review the data being used in the database.
• Creates and reacts to reports which measure the benefits and quality of the knowledge database.

Skills required include:

• Proven project management skills and an analytical ability.
• Working with little direction, manage multiple tasks and use sound judgement.
• Effective communication skills, both verbal and written.
• Technical writing skills
• Able to look at the “big picture” to ensure appropriate direction is taking place.
• Technical knowledge of PC desktops, mainframe and other technology
• Basic knowledge of SQL
• Problem Solver

4.8 Report Writer

The Report Writer role is mainly responsible for producing statistics and reports from the Ticketing Tool.s Accountabilities include:

• Designs, develops and produces reports/files by extracting data from CTT and PTT and other data resources such as mainframe datasets and Access databases.
• Maintains and develops the Tivoli Support Web site on an ongoing basis.
• Produces monthly reports for budget purposes and service level statistics.
• Participates in data gathering, trend analysis and special projects such as Compass by providing data and analysis for detailed assessments.

Skills required:

• Knowledge of a database query languages, such as Microsoft SQL 6.5 and MS Access.
• A working knowledge of Web page development and maintenance (Microsoft FrontPage, HTML, ASP and some JavaScript) would also be required.
• Experience with reporting tools, such as Crystal reports, Impromptu or PowerPlay

• Strong analytical, communication and organizational skills are essential in order to interpret requirements and deliver meaningful information.

• Able to work independently yet interacts with a variety of teams and individuals at various levels. Identifying knowledge databases
5 Tool Requirements

The following is a summary of the generic tools and key functional requirements for the tools to support the process. The prefix indicates the primary activity of the process that requires the function. Following this table the key tool requirements are documented in more detail.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACD</td>
<td>Automated Call Distribution</td>
</tr>
<tr>
<td>IVR</td>
<td>Interactive Voice Response</td>
</tr>
<tr>
<td>CTI</td>
<td>Computer Telephony Interface</td>
</tr>
<tr>
<td>CFG</td>
<td>Configuration Management Tool</td>
</tr>
<tr>
<td>SHT</td>
<td>Self Help Tool</td>
</tr>
<tr>
<td>DEM</td>
<td>Distributed Event Monitor and Automation Tool</td>
</tr>
<tr>
<td>CGT</td>
<td>Change Ticket Tool</td>
</tr>
<tr>
<td>CTT</td>
<td>Incident Ticket Tool</td>
</tr>
<tr>
<td>VWB</td>
<td>Virtual White Board Tool</td>
</tr>
<tr>
<td>OLD</td>
<td>Online Documentation</td>
</tr>
<tr>
<td>PTT</td>
<td>Problem Ticket Tool</td>
</tr>
<tr>
<td>RCT</td>
<td>Remote Control Tool</td>
</tr>
<tr>
<td>SDM</td>
<td>Software Distribution Tool</td>
</tr>
<tr>
<td>TCST</td>
<td>Technical Support Tool</td>
</tr>
<tr>
<td>VRT</td>
<td>Vendor Repository</td>
</tr>
<tr>
<td>BRT</td>
<td>Backup / Recovery Tool</td>
</tr>
<tr>
<td>SC</td>
<td>Scorecard</td>
</tr>
<tr>
<td>CT</td>
<td>Communication Tool</td>
</tr>
<tr>
<td>ACTIVITIES / TASKS</td>
<td>GENERIC TOOL TYPE</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Initialization / shutdown</strong></td>
<td></td>
</tr>
<tr>
<td>Start/stop support systems</td>
<td>✓</td>
</tr>
<tr>
<td>Login/Logoff to ACD</td>
<td>✓</td>
</tr>
<tr>
<td>Check system outage emails</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Check “whiteboard”, “hotnews”</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Check open tickets</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Check with Data center, other user support groups</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Receive Client Contact</strong></td>
<td></td>
</tr>
<tr>
<td>Establish contact</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Answer email or voicemail</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Validate client personal data</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Open Incident/Identify Client</strong></td>
<td></td>
</tr>
<tr>
<td>Check client’s incident history</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Verify client’s personal data</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Verify client’s configuration</td>
<td>✓</td>
</tr>
<tr>
<td>Log client information</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Record incident source</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td><strong>Identify Incident Profile</strong></td>
<td></td>
</tr>
<tr>
<td>Determine incident type</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Identify related procedure based on type</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td><strong>Record Contact Information</strong></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Record all data directly into the logging tool (against the client id experiencing the issue)</td>
<td>✅ ✅ ✅ ✅ ✅</td>
</tr>
<tr>
<td>Document all actions taken in the work history</td>
<td>✅ ✅ ✅ ✅ ✅ ✅ ✅</td>
</tr>
<tr>
<td>Search for known errors</td>
<td>✅ ✅ ✅</td>
</tr>
<tr>
<td>Identify root cause using system support/diagnostic tools</td>
<td>✅ ✅ ✅</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ACTIVITIES / TASKS</strong></th>
<th><strong>GENERIC TOOL TYPE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Resolve Contact, Route Problem or Change Request</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply identified solution</td>
<td>✅ ✅ ✅ ✅ ✅</td>
</tr>
<tr>
<td>Close incident if solution worked</td>
<td>✅ ✅ ✅</td>
</tr>
<tr>
<td>If solution failed, edit request solution for knowledge management team</td>
<td>✅ ✅</td>
</tr>
<tr>
<td>Create a problem ticket</td>
<td>✅ ✅ ✅</td>
</tr>
<tr>
<td>Create a change request</td>
<td>✅ ✅ ✅ ✅ ✅</td>
</tr>
<tr>
<td>Set client’s expectations, if unresolved, based on severity &amp; priority</td>
<td>✅ ✅</td>
</tr>
<tr>
<td>Complete contact</td>
<td>✅ ✅</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Advise Client of Status</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform status check of open problems</td>
<td>✅ ✅ ✅</td>
</tr>
<tr>
<td>Update priority if required</td>
<td>✅ ✅</td>
</tr>
<tr>
<td>Advise problem resolution owner</td>
<td>✅ ✅ ✅</td>
</tr>
</tbody>
</table>

---

*Incident Management Process Description*
Cross reference incident to problem, if new incident

Receive problem resolution (for existing incident)

Advise client and gain concurrence that it is resolved

Close the incident

If client concurrence is not gained for the problem resolution, re-open the problem record

Increase the priority

---

### ACTIVITIES / TASKS

<table>
<thead>
<tr>
<th>ACTIVITIES / TASKS</th>
<th>GENERIC TOOL TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close Contact</td>
<td></td>
</tr>
<tr>
<td>Close incident record</td>
<td>✓ ✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>End contact dialogue</td>
<td>✓ ✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Track, trend and report contacts</td>
<td></td>
</tr>
<tr>
<td>Define reporting requirements and practices</td>
<td>✓</td>
</tr>
<tr>
<td>Identify data source</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Data analysis</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Generate action plans for improvement and enhancement of the process</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Produce Support report card (DOU results/attainment)</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>
5.1 **Key Generic Tools and Tool Functions**

The following generic tool types have been identified to assist in providing productivity enhancements or to automate Incident Management tasks. Key tool functions have been documented, and are listed in priority order, using different bullets to distinguish between short, medium and long term requirements.

- **Short Term Requirements** – reasonable small efforts
- **Medium Term Requirements** – typically interfaces between tools, or functions that will require larger efforts in tool modifications
- **Long Term Requirements** – will likely require major efforts, or require significant investments in other processes such as Change Administration, Configuration Management to enable the tool function

**ACD - Automated Call Distribution**

Routes incoming telephone calls to appropriate Help desk (HD) personnel. Data collected can be used to track call levels and make recommendations for staffing levels.

- Profile of Customer
- Call Reporting (service statistics)
- Notify user of current status
- Auto Route to Call Handler based on skills
- Queue Management

**IVR - Interactive Voice Response**

Responds to calls and offers callers status information and options on describing and routing their calls, and requesting specific pre-determined actions.

- Notify users of current status
- Voice menu
- Interface to Virtual White Board
- Integration with Problem Ticket Tool (problem status)
- Ability to reset passwords

**CTI - Computer Telephony Integration**

Interfaces voice commands with the computer applications. Based on user information provided by voice, and other problem information, can choose which computer actions to take.

- Screen popups based on situation
• Interface for caller information
• Integration with customer profile
• Log password reset requests

♦ E-mail interface
♦ Queue management
♦ Integration with configuration database

CFG - Configuration Management Tool
Automated tool that facilitates collection, storage and retrieval of inventory and configuration data.

♦ Access to current information
♦ Maintain device status records
♦ Update configuration data
♦ Automatic update capability
♦ Spare inventory information
♦ Provide information for determining severity of problems
♦ Interface to PTT

SHT – Self Help Tool
Web based (Intranet) tool that assists users to identify and potentially resolve problems.

☐ Interface to Virtual White Board
☐ Easy to use
☐ Ability to log incidents
☐ Provide workarounds

♦ Interface to PTT (including Hotnews) to view information on relevant open problems and update information as appropriate
♦ Link to Configuration for current status of components
♦ Access to knowledge bases

DEM - Distributed Event Monitor, Correlation and Automation Tool
Provides for the monitoring and forwarding of systems and network management information across a distributed environment. Alerts based on such information would be turned into alerts based on filters and thresholds. Displays real-time status of critical IT components, such as Notes servers, network components, mainframe, NT servers, LANs, etc. Application monitoring through probes in key applications should also be able to be handled.
- Impact assessment & filing component
- Monitor of all of environment (heartbeats, performance, signals when components are restored after outages)
- Real time status display
- Ability to filter & threshold information, and to validate information
  - Correlation of events from multiple event sources
  - Event log analysis
  - Interface to problem ticket tool (new/update)
  - Interface to configuration data
  - Determine severity of alerts through analysis of components or business units affected

**CGT - Change Ticket Tool**
Automated facility for entering, updating, tracking and communicating all relevant information regarding a notification of systems change.

- Quick reference of recent changes (to components)
- Provide backout information for service restorations where a change was the cause of the problem

**CTT – Incident Ticket Tool**
Provides for a ticketing system to record all types of calls received. Supports the follow-up, on tracking and coordination of response activities as the Incident is handled by the support organization.

- Integration with problem ticket tool to allow incidents to be transferred to become problems.

**VWB – Virtual White Board Tool**
Communications facility to provide miscellaneous problem status on an accessible virtual message board.

- Accessible by business partners
- Interface from problem ticket tool

**OLD - Online Documentation and Knowledge Bases**
Documentation/knowledge bases of various information available online from standard desktop.

- Ability to search problem data (by component, message, cause, text)
- Access to procedures (identify problem)
- Recovery procedures, including how to validate results
- Interface to problem ticket tool
- Knowledge based
• Access to call-in lists
• Notification lists
• Component reference information
• Access to STS service level agreements
• Access to vendor service agreements
• Ownership information

**PTT - Problem Ticket Tool**

Provides a ticketing system to record all problems received. Supports the follow-up tracking and coordination of response activities as the problem is handled by the support organization.

- Ability to Correlate problems
- Full-screen free-form data entry, rather than a "key hole" view of data
- Ease of getting data in and out
- Cut and Paste capability to and from all fields
- Undo capability
- Search on text, especially the abstract line
- No automatic escalation, as we do not close problems until we have a quality resolution in production
- Ability to attach incidents to problems, and a counter of the number of attached problems
- Ability to view just problems without the attached incidents
- Ability to transfer problems
- Notification if a problem is transferred
- Ability to transfer to a team id (and notify a team e-mail id) rather than an individual
- Detailed report capability, which would print all data in a particular problem record
- Summary report capability, producing just one line per problem with user selected fields
- Permanent user tailoring, allowing a user to permanently tailor the view he prefers, with user selectable fields
- Ability to assign meaningful field names to user fields
- A description of the impact, with more granular information than that provided by the severity (number of users, amount of pain)
- Ability to search others' problems
- Simple; ease of use
Two or three main panels: one panel for keyword fields and one or two for free form data entry

Keyword fields for vendor problem number and fix id (apar and ptf numbers)

Ability to search on all keyword fields, especially vendor problem number

Data validation

Integration with Incident tickets

Notification (pager or e-mail)

Assist in assigning severity

Reporting - easy access

References to workarounds that have proven successful

Reporting - flexible reporting types

Assist in performing problem escalations

Access via web

Access to tickets (queries)

Ability to generate reports based on geography, user, component

Ability to generate cause code/resolution code reports

Trend analysis capability

Easy to find records

Over 200 records in one view

• Ability to tie change ticket to a problem ticket

• Automated close of duplicate records

• Volume thresholding (signals when multiple, similar problems are being opened)

• Links to other sources of diagnostic information on particular problems has been stored e.g. Notes

♦ Interface to configuration data

♦ Interface to CTI

♦ Ability to notify/update vendor or other remote service providers (future requirement)

**RCT - Remote Control Tool**

Allows for remote takeover of a PC to facilitate faster problem determination.

• Access to remote devices to perform or validate workarounds

• Access to desktops
• Access to servers
• High performance (bandwidth requirement)
• Reboot facility

**SDM - Software Distribution Tool**
Provides for the preparation of devices (servers and desktops) to accept a software change, the movement of the software change to the remote device and the post installation tasks to invoke and validate the change.

• Ability to download configuration information
• Provide software maintenance levels
• Pull facility (user initiated)

**TCST - Technical Support Tools**
Variety of tools, platform specific, used by 2nd and/or 3rd level support staff to assist in such activities as answering queries or trouble shooting problems.

- Access to logs
- Network analyzer
- Ability to correlate across components environments
- Data reduction capability
- Ability to ping devices

**VRT - Vendor Repository**
Database of all vendors, service level agreements, maintenance agreements, contacts, and escalation procedures.

• Search facility
• Workaround information / availability
• Web access
• Ability to exchange information
• Access to support resources

**BRT – Backup / Recovery Tool**
Facility for data and software backups.
• Automation of backups
• Support for incremental backups
• User initiated restores
• Versioning support

**SC – Score Card**

Tool to capture and report on information relative to satisfaction with the Incident Management process.

**CT – Communication Tool**

Methods of communicating with process participants not included in the communication functions of the other defined tools

• Email
• Telephone
• "Walk-in"
Appendix A: Incident Management Standards and Control Elements

A.1 Incident Types
Any contact with Techelp has been defined as an Incident. The incident type determines the way in which it will be handled by the Techelp Consultant and they are listed below:

- **Status update** (of an existing incident)
- **Request for Change**
- **Failure** (hardware, software, inability to perform a business function, etc.)
- **Misdirected call**
- **Wrong number**

Techelp's primary objective is to resolve or route to the appropriate support group all incidents within a guideline of 15 minutes. By definition, incident types of failure will become a problem and be passed to the Manage Problems process.

All of the listed incident types except Request For Change, will be included in the determination of Techelp’s attainment of the Help Desk Industry Standard Metrics.

Also, all incidents will be assigned a severity and a priority

A.2 Incident Source
Any contact with Techelp has been defined as an Incident. The incident source identifies the path through which the incident was reported to Techelp and they are listed below:

- **TELEPHONE**
- **EMAIL**
- **WALK-IN**
- **WEB**
- **VOICE MAIL**
- **TPM TRANSFER**
A.3 Severity Levels

Severity codes are assigned on an objective basis to indicate the wide business impact of an incident (reported as a problem by the clients of Techelp)

Severity codes on incidents do not change unless the business impact changes.

These codes have been arranged in an order of 1 to 4 with number one (1) being the most critical. Severity codes will be assigned when the incident record is created.

<table>
<thead>
<tr>
<th>Severity Level</th>
<th>Impact or Potential Impact on Deliverables</th>
<th>Examples</th>
</tr>
</thead>
</table>
| 1              | • Key business process(es) or client service is **disabled**.  
• The service has **critical** business impact.  
Wide spread across multiple business units, or one entire and critical business unit (eg CSC).  
♦ **All**  | • A key software component that’s an integral part of delivering service (i.e. MVS, VTAM, IMS, CSW application).  
• The integrity of an application or system (i.e. problem with an ICF catalog or on-line database).  
• The availability of hardware that’s crucial to delivering service to at least one location or line of business (i.e. Host CPU, Network FEP, DASD).  
• Software problem that impacts batch processing (i.e. data mover, tape management system, scheduling system  
• Critical LAN Server or Gateway down impacting many users  
• Branch locations disabled. |
| 2              | • Key business process(es) **impaired**, but not disabled.  
• More than one person, but business unit is still able to function.  
• **Some**  | • Software problem – but not business critical (i.e HR Access)  
• Business Application functions up-but response time degraded.  
• Single Notes server  
• Software problem that affects a **crucial** system monitoring tool. (ie Call Center Mgmt reports)  
• Hardware problem that impacts batch processing (i.e. a bank of tape drives, more than 1 printer, DASD).  |
| 3              | • Moderate business impact.  
• Business process may be impaired, but client service not impacted.  
• One or more people, with no undue **business** productivity impairment.  
• **One**  | • Problems with software required for system support (i.e. remote console, other monitoring tools).  
• MS Office products  
• Printer hardware problems that impact group of users.  
• No Host Connect for one person.  
• Batch job failure that impacts report availability.  
• Password reset |
| 4              | • Minimal business impact.  
Nuisance. Easily bypassed by user.  
• Minimal client service impact.  
• One or more people with no productivity impact.  
• **Nuisance**  | • A branch service call that has no impact to the branch (i.e. problem with a spare terminal).  
• “How to”...questions for supported software products. Desktop printer is down and will not print. |
A.4 Incident Priorities

The priority code is used to indicate the attention the resulting problem (i.e. for those incidents passed to the Manage Problems process) should receive in relation to other problems of the same severity level. Priority reflects the urgency of a problem from the client perspective. The priority schemes allow for consistent escalation of problems.

All incidents begin with priority 4, and as the criteria documented below are met, the priority of a problem is changed (within a given severity). The criteria shown are based on the expectations of service response time and/or service restoration.

In general, all incidents resolved on the first call will by default have a priority rating of 4, but the Techelp Consultant must understand the Manage Problems control elements in order to provide accurate status updates and set the appropriate expectations with their clients for all incidents unresolved on the first contact (i.e. related problems).

The priority scheme will be refined over time to best allow for acceptable and effective escalation.

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1              | • Resolution time exceed by 4 times  
• Response time exceeded by 4 times  
• Recovery target exceeds standard by 4 times  
• Problem recurs more than 10 times  
• Management Judgment |
| 2              | • Resolution time exceeded by double  
• Response time exceeded by double  
• Recovery target exceeds standard by double  
• Problem recurs more than 5 times  
• Management Judgment |
| 3              | • Resolution time exceeds standard  
• Response time exceeds standard  
• Recovery target exceeds standard  
• Problem recurs more than 2 times  
• Client calls backs indicating urgency  
• Management Judgment |
| 4              | • Starting point / Default |

Call backs from clients indicating urgency of their particular problem would be justification of increasing the priority level of a problem (under management judgement)
**Note:** You are able to make your own judgment call and raise the priority a. For Example: If a client calls Techelp and reports a No Host Connect, Techelp can begin the ticket with priority 3.

### A.5 Incident Record Status

Incident status reflects the current state of an incident and the following are defined:

**OPEN** – Incident is active.

**TRANSFERRED** – Problem opened, assigned to next level of support within STS.

**HELD** – Problem assigned to group that is not TPM accessible and outside the scope of the Manage Problems process.

**CLOSED** – Closed - The incident has been closed and fixed

### A.6 Cause Codes

Cause codes indicate WHY the incident occurred. When an incident is closed a cause code must be assigned. Cause codes are used to produce reports which allow analysis to be done to reduces occurrence, frequency of incidents.

We are using numbers to define a cause code for example: 1 = Component Failure.

<table>
<thead>
<tr>
<th></th>
<th>Cause Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Component Failure</td>
<td>Hardware, software or other component broke.</td>
</tr>
<tr>
<td>2</td>
<td>Result of Change</td>
<td>Implementation of a change, not considered human error but a change that followed reasonable procedures, created the problem</td>
</tr>
<tr>
<td>3</td>
<td>Erroneous Procedures / Documentation</td>
<td>Incorrect instructions, or incomplete instructions</td>
</tr>
<tr>
<td>4</td>
<td>Insufficient Capacity</td>
<td>Lack of DASD space, memory or other hardware or software limitations</td>
</tr>
<tr>
<td>5</td>
<td>STS oops</td>
<td>Mistake/error/goof - made by person in STS.</td>
</tr>
<tr>
<td>6</td>
<td>Environment</td>
<td>Power or other supporting facility. Act of God.</td>
</tr>
<tr>
<td>7</td>
<td>Client oops</td>
<td>Spilled coffee on keyboard, client was in Explorer and moved some files to a different folder and now applications will not work.</td>
</tr>
<tr>
<td>8</td>
<td>No Trouble Found</td>
<td>The exact cause of the problem cannot be determined</td>
</tr>
<tr>
<td>9</td>
<td>Security</td>
<td>Password or other security element ignorance, misuse or incorrect specification</td>
</tr>
<tr>
<td>80</td>
<td>Service Request</td>
<td>Change name on display of phone, client requests to have PC re-imaged, request for phone change,</td>
</tr>
<tr>
<td>81</td>
<td>How To</td>
<td>How to import a table into Excel. How to transfer a file from the mainframe to my PC.</td>
</tr>
<tr>
<td>82</td>
<td>Working as designed</td>
<td>Product, service, hardware is working properly (but may not be how clients expect it to work).</td>
</tr>
<tr>
<td>99</td>
<td>Other codes relating to specific STS component oriented causes</td>
<td>If an STS support person uses Other, they need to put in Work History why they used Other.</td>
</tr>
</tbody>
</table>
Appendix B: Reporting by the Incident Management Process

The types of reports that are produced by the Incident Management process or for use by the process itself, or for the usage by other processes, are dependent on the actual report-users and the client requirements. This appendix provides an example of reports that can be used for the Incident Management process. Actual reporting structures and reporting layouts are outside the scope of this document.

B.1 “Help Desk” Industry Standard Metrics

The following industry standard metrics are used to determine the effectiveness and efficiency of the Incident Management process:

<table>
<thead>
<tr>
<th>Service Element</th>
<th>Industry Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>&gt;= 90%</td>
</tr>
<tr>
<td>First call resolution</td>
<td>80%</td>
</tr>
<tr>
<td>Speed to answer</td>
<td>80% &lt;= 20s</td>
</tr>
<tr>
<td>Hold Time</td>
<td>20% &lt;= 2 m</td>
</tr>
<tr>
<td>Abandon rate</td>
<td>5% or less</td>
</tr>
</tbody>
</table>

Reporting will be based on the need to demonstrate the achievement of these targets and will be created, published and distributed as determined by the Team Leadership.

To facilitate process improvement, the following reports will also be created:

- Reports on total number of incidents, by category, cause, severity, priority and other significant sequences.
- Reports providing the number of incidents broken down by Business Unit, as required.
- Reports relating to service level achievements.
- Reports relating to the effectiveness and attainment of the Documents of Understanding between the Level 1 and Level 2/3 support groups.
Appendix C: Meetings of the Incident Management Process

C.1 Techelp Team Meeting

Description:

This is a weekly meeting held to provide timely cross team communications on the process and related issues. It is an essential part of ensuring that the Techelp Consultants are functioning as a cohesive team.

Meeting Agenda:

This is a round table discussion that includes:

- Review key service deliverables attainment for the previous week
- Review open incidents
- Review status and action items for open problems
- Review exceptions
- Discuss any new tasks, action plans, issues or concerns and assign an owner
- Review Incident Management reports on a monthly basis

Attendees:

1. Incident Management Team Leader (Chairperson)
2. Service Owner – representing their service
3. Process Coordinator
4. Techelp Consultants

Time and Place:

tbd

Meeting Preparation:

Review the Incident Management reports
Appendix D. The Customer Satisfaction Management Process

D.1. Process Foundation

Definition of Customer Satisfaction Management

The Customer Satisfaction Management process is designed to evaluate and manage customer expectations, and measure customers perception of the services delivered.

Goals and Objectives of Customer Satisfaction Management

The goals are:

- To identify, measure and manage the key contributors to customer satisfaction
- To achieve the stated goals for the percentage of customers satisfied
- To identify any early signs of customer dissatisfaction so that there are no major surprises
- To remedy the causes for dissatisfaction that the customer might have

The objectives are:

- Evaluate and manage customer expectations of Level 1 support
- Accurately measure customer perception of Level 1 support
- Communicate survey results and performance improvement plans

Scope of the Customer Satisfaction Management Process

The Customer Satisfaction Management process begins with understanding customer expectations in relation to Level 1 performance. It continues with performing surveys, analyzing and communicating the survey findings, and results in developing continuous service improvement plans.

- 7.1 Determine Customer Req’mts & Expectations
- 7.2 Evaluate Service Level Goals & Ability to Attainment
- 7.3 Determine Performance Gaps
- 7.4 Survey Customers
- 7.5 Survey Suppliers
- 7.6 Develop & Deploy Improvement Plans
- 7.7 Analyze & Communicate Survey Results

Other Management Processes:
- Call Management
- Problem Support Management
- Workload Management
- Skills Management
- HR Management
- Technology Management
- Comm. Management
- other...
7.1 Determine Customer Requirements and Expectations

The first step in this process is to gather and document customer requirements and expectations.

**Objectives**

- Get a clear understanding of customer requirements and expectations

**Tasks**

1. Define target clients
2. Define attributes of needs
3. Collate information received
D.5  7.2 Evaluate Service Level Goals and Current Ability to Achieve Attainment

Evaluate predefined service level goals and Level 1’s current processes, procedures, tools and resources available to achieve attainment of those goals.

Tasks

1. Identify services and their goals
2. Measure attainment by service
3. Identify gaps
D.6 7.3 Determine Performance Gaps

Identify gaps in required and expected performance versus ability to deliver

Tasks

1. Document performance gaps attainment versus published
2. Identify Trends
D.7  7.4 Survey Customers

Use different survey methods to measure customer satisfaction according to defined corporate measurement policies.

Tasks
1. Establish survey guidelines
2. Determine survey method
3. Document survey findings
4. Evaluate survey data
Use survey methods to measure supplier satisfaction according to defined corporate measurement policies.

Tasks
1. Establish survey guidelines
2. Determine survey method
3. Document survey findings
4. Evaluate survey data
D.9  7.6 Develop and Deploy Improvement Plans

Analyze customer and supplier survey results to determine perception of service delivery performance. Develop improvement plans to address those areas requiring performance improvement. Deploy improvement plans.

Tasks

1. Identify areas of improvement
2. Develop action plans
3. Assign owner to actions
D.10 7.7 Analyze and Communicate Survey Results

Analyze the survey results and communicate the results according to corporate communications policies

Tasks

1. Communicate results according to communication plan
Appendix E. The Communication Management Process

E.1. Process Foundation

Definition of Communication Management

The Communication Management process is designed to receive and distribute relevant information to technical staff, other support areas and customers.

Goals and Objectives of Communication Management

The following are the goals and objectives of the Communication Management process:

- Receive and distribute information in an effective, efficient and timely manner both within the Level 1 support organization and between Level 1, Level2 and customers
- Enable Level 1 to prepare (workload, skills, staffing, communications, knowledge base) for any impact a planned change may have on customers and Level1.

Scope of the Communication Management Process

The Communication Management process is designed to manage communications to and from the Level 1 organization, particularly those communications that involve changes to the environment that impact Level 1 and/or customer service. It also contains the process elements to determine the appropriate methods of communication and recipients for normal activities as well as those activities of a critical nature.
E.2. Communication Management Process Flow
8.1 Develop Communications Plans

Identify and categorize communications to Level 1 from other support organizations and customers and from Level 1 to other support organizations and customers. Develop plans to disseminate appropriate information to Level 1 personnel, other support organizations and customers. Development plans include the type of information to be communicated (e.g. software version changes, hardware platform changes, application changes, etc…), the communication methods to be utilized and the target audience.

Tasks

1. Identify target audience
2. Develop plans based on audience
E.4  8.2 Establish Communication Distribution Paths

Define and establish effective, efficient and reliable paths for the distribution of information (e.g. meetings, reports, e-mails, quick reference cards, etc…)

Tasks

1. Identify type of media
8.3 Design Communication Formats and Methods

For each distribution path, design the format of the communication to most effectively and efficiently communicate appropriate information.

Tasks

1. Design format for each type of communication path
**E6 8.4 Distribute Reports**

Distribute Reports to identified target audience as defined in the Communication Plan

**Tasks**

1. Define reports based on audience
2. Distribute to identified target audience
Identify management, Level 2 and customer personnel who should be advised when critical situations occur. Develop action plans to manage and communicate critical situations according to the predefined Communication Plan.

Tasks

1. Identify contact list for critical situations
2. Communicate based on situations
Communicate and advertise Level 1’s plans and strategies for improvement

Tasks

1. Communicate action plans for improvement based on SLA attainment
2. Communicate action plans for improvement based on client survey feedback
3. Communicate Level 1 initiatives, new services etc…
Solicit feedback from customers and Level 1 service in providing communications that enhance customers' ability to deal with their current environment or with changes to the environment.

**Tasks**

1. Develop relationship between Techelp and the business units (advocacy, understanding the business and demonstrating IT value)
Appendix F Problem Support Process

This process is invoked when an incident cannot be resolved by the Level 1 support staff (Techelp Consultant). It is shown here as a logical process of the ‘Help Desk’ model, but is in fact part of the Manage Problems process.

F1 Process Overview

Definition
The Problem Support process defines how a problem is handled by establishing the rules for the relationship between Level 1 and Level 2 support organizations. While it is shown logically as a separate process, the Techelp Consultant may perform all steps: 2.1 through 2.9 (except 2.6) as part of the Incident Management process, depending on the tools implemented for Incident and Problem Management.

Objectives
The following are the goals and objectives of the Problem Support process:

- Establish the rules, roles, and workflow that define the relationship between the Level 1 support and Level 2 organizations
- Establish the rules that define problem flow
- Provide data to measure Service Level attainment

Scope
The Problem Support process begins when a Level 1 Incident Owner has identified that a contact contains a problem (Incident Management, element 1.5 Resolve Contact or Route Problem) and continues through the recording, and monitoring of the problem.

Assigning the problem uses predefined procedures and business rules established by Level 1 and Level 2 organizations.

A problem is identified by Level 1 as a contact for which there is no known resolution.

Relationship with Other Processes
This process is triggered by the Incident Management process, 1.5 Resolve Contact or Route Problem and, upon its resolution, returns to the Call Management process, 1.7 Close contact.
The Problem Support process is dependent upon the integration and interaction with other information technology supporting processes to provide a true 'Best Practices' support organization. Each process receives input from and provides output to the other processes. 'Best Practices' support organizations depend upon coordination among all the processes.
F2 Problem Support Management Process Flow

From Incident Management 1.5

2.1 Create Problem Record
2.2 Perform Problem Determination
2.3 Assign Problem Severity and Priority
2.4 Assign Problem
2.5 Monitor Problem Status
2.6 Manage Problem Flow
2.7 Advise Client of Status
2.8 Review Problem Resolution
2.9 Update Knowledge Base
2.10 Track, Trend, & Report Problems

To Incident Management 1.5

Automated Event Mgmt
Manually Detected Problem

To Manage Problems

Manage Problems Flow

Problem Support Flow (logical)