Application Incident Management
Infrastructure

SAP Business Suite
- SAP CRM Service
- SAP ERP (HR, FI, Asset)
- SAP CRM IT Service Mgmt.

Interoperability with ALM processes
- Projects
- Root Cause Analysis
- Change Management
- Test Management

Connectivity to SAP managed systems
- Incident & Service Request Management
- Problem Management
- Change Management
- Knowledge Management
- Service Level Management
- Installed-Base & Object Management
- Customer

ERP, SCM,...

SAP Collaboration
- SAP Global Support Backbone
- & Partner Ecosystem
Application Incident Management
Overview - Process

Incident inbound channels
- SAP solutions
- Enduser Self Service
- 3rd party Help Desk
- Phone & E-Mail via Interaction Center
- ALM process (Test, Implementation, Alert, etc.)

Incident & Problem Management
1. Receive
2. Search
3. Dispatch
4. Analyze
5. Forward
6. Provide Solution
7. Analytics

Incident/Problem follow-ups
- SAP Support
- Change Request
- 3rd party Help Desk
- Tasks
- Known Error
Application Incident Management
Use case - IT Service Management

ITSM for the whole IT customer solution

New sales opportunity received via mobile device
Entered in SAP ERP / CRM System
Saved in 3rd party database
Printing of Invoice

“Need Firm-ware update“
„Low performance in PO1“
„Can’t save my data“
„Printer is out of paper“

Incident Management
Problem Management
Change Management
Application Incident Management
Use case - SAP support centric use case

Customer

Business User

SAP Application

Incident is recorded

Key User

Customer Knowledge Database

Root Cause

Root Cause

Solution

SAP

SAP Service Marketplace

Search for Solution

Forward Problem

Root Cause

Solution

SAP Support

SAP Notes Database

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Inbound channels
The SAP Frontends have a preconfigured integration into the Application Incident Management of SAP Solution Manager.

The user of SAP solutions can create incidents out of their current transaction. The incident will be enriched automatically with system information (e.g. User, Support Package level, transaction, etc.)

The SAP component is auto-assigned based on the transaction from where the user creates the incident.

**Following SAP Frontends are supported:**

- SAP GUI
- SAP Netweaver Business Client
- SAP Portal
- SAP CRM WebClient
The Business role ITSM_Requestor is designed to create incident messages in an end user self service scenario.

The Business role can be configured to customers requirements
SAP Solution Manager still provides a Work Center UI for Application Incident Management. It contains a preconfigured role for end users to

- Report new incidents
- Track, reply and confirm the own incidents

and a preconfigured UI for message processor to

- Define own search queries
- Status overview
- Monitor a watch list
- Preview on incidents
All functionality relevant for IT service desk agents can be found in the IT Service Desk Agent role.
SAP CRM Interaction Center provides IT service desk agents with a multifunctional framework including all of the tools they need for their jobs:

- Role-based access
- Account identification with object and installation identification
- Interaction History
- Incident, Problem, Request for Change Management
- Agent Inbox
- Knowledge Article Search
- E-Mail Response Management System
- Scripting, Alerts and Messages
- Transaction Launcher
- Optional integration with SAP Business Communication Management or 3rd party telephony system
Incidents and problems are now enabled for E-Mail Response Management System in Interaction Center environments, allowing:

Automatic creation of Incidents and problems based on ERMS processed inbound e-mails

Automatic linking of reply e-mails to the original Incident / problem

Routing of a generated service request / problem to a specific service team or employee responsible
Application Incident Management
Build & Design Phase

Create & track issues in design

Create & track issues in configuration

Makes Business Blueprint and Configuration issues transparent
Application Incident Management
Test Phase

Log & track test defects

Use Service Desk for central test defect resolution
Application Incident Management
Deploy Phase

Create follow-up activity to deploy changes to resolve an incident

Service Desk to log business change requirement
Application Incident Management supports the workflow for resolution of alerts, increases the availability of the IT solution, and minimizes negative business impacts.
SAP Solution Manager offers a bi-directional interface that enables the exchange of messages between Service Desk and third party help desk tools or another SAP Solution Manager Service Desk. It enables customer to use SAP Solution Manager for SAP related incidents in addition to an existing Help Desk tool.
SAP CRM Release 7.0 provides a standard interface to SAP Solution Manager, for Incident Management.

- Incident messages can be transferred from CRM to the SAP Solution Manager for further processing, e.g. by Global SAP Support.
- The incident messages are replicated and the CRM status keeps synchronized while the processing in SAP Solution Manager.
If an incident you have created in the SAP CRM system needs to be processed in the SAP Solution Manager system, you can set the SAP Solution Manager Process status. This will create a corresponding incident in the SAP Solution Manager and the incident will be processed there.

Status and other updates will be reflected in the SAP CRM system.

The IT service desk agents and IT service professionals have easy access to the SAP Solution Manager work centers, e.g. if they quickly want to check some information about an SAP application.
Incident & Problem Management
The Objective of Incident Management is to restore normal operations as quickly as possible with the least possible impact on either the business or the user, at a cost-effective price.

The primary Objectives of Problem Management are to prevent Incidents from happening and to minimize the Impact of Incidents that cannot be prevented”

Information Technology Infrastructure Library (ITIL)

SAP Solution Manager supports the complete processes of Incident Management and Problem Management and offers a high integration with SAP and IT environment. This helps customers to lower the meantime to resolution and by this to increase the availability of mission critical business processes and to gain 100% transparency on issues and challenges.
Application Incident Management
Incident Details (1)

In the Incident (Service Request) Details you can document:
- who has reported the issue and who is responsible for it
- the processing status
- SLA dates
- the impact, urgency, priority and multiple categories
- textual descriptions of diverse text types
- which objects are affected
- whether the incident is assigned to a problem, request for change, or knowledge article

In the incident you have access to:
- Dispatch
- Auto Complete
- Find Related Problems
- Find Knowledge Articles
- Unlock
- Send E-Mail
- Print / Print Preview

You can create an incident "from scratch" or from a template.
You can copy an existing incident.
You can create follow-up transactions from the incident, for example, a problem or a change request.
In the incident, you have access to detailed information such as

- SAP Attributes and Collaboration activities
- Related knowledge articles and further related transactions
- Attachments and notes (correspondence, SAP Notes)
- ALM process integration (Testcase defects, Alerts)
- Information about related Business processes
- Date and duration information
- Time recording
- Organizational data and parties involved
- Change history and processing log
- 3rd party Help Desk interfaces
Application Incident Management
Problem Details (1)

![SAP Solution Manager IT Service Management](image)

In the Problem Details you can document:

- who has reported the issue and who is responsible for it
- the processing status and requested start and end date
- the impact, urgency, priority, problem category and further categories
- textual descriptions of diverse text types
- which objects are affected
- whether the problem is assigned to a knowledge article or request for change
In the problem you have access to:

- Dispatch
- Auto Complete
- Find Knowledge Articles
- Send E-Mail
- Print / Print Preview
- Display Object Relationships

- You can create a problem 'from scratch' or from a template.
- You can copy an existing problem
- You can create follow-up transactions from the problem, for example, a knowledge article or a service confirmation
If several incidents (or service requests) are probably related to the same root cause, the IT service professional can assign these incidents to a problem.

The IT service professional can search for the incidents via value help, or via “Find Related Incidents“.

“Find Related Incidents“ gives a list of incidents which have the same catalog categorization as the problem. The IT service professional can select the relevant incident/s and assign them to the problem.

To stop individual processing of the incidents, the IT service professional can lock the incidents to the problem, so that only the problem needs to be completed and the locked incidents will then be automatically closed.
Application Incident Management
Unlock an Incident from a Problem

An incident can be assigned and locked to a problem (or also a request for change). In this case the incident will not be processed individually. The completion of the problem (request for change) will automatically close the incident.

If an incident is locked to a problem (request for change) but the IT service professional would like to process it individually after all, the employee can select "Unlock" in the incident to open the incident again for processing.
Create Knowledge Article as Follow-Up

**Problem: 8000000021, Monitor adjustment issues**

- If you have found the reason for a problem, you might want to create a knowledge article for it.
- From the problem you can create a knowledge article through “Create Follow-Up”. The new knowledge article can then be used for issue resolution of future incidents.
Incident & Problem– Features
A problem is an incident to which one or more incidents are assigned and locked. When many incidents are locked to a problem, users process only that problem rather than processing multiple incidents individually.

Nearly all functions as described for the Incident also apply to the problem. Not included in the problem are:
- Unlock
- Find Related Problem
- Process Flow of Service Request

In addition to incident functions, the problem offers:
- Related Incidents assignment block to bundle incidents
- Pricing, shipping and billing assignment blocks
Service and response profiles can be assigned to several SLA-relevant objects, such as contracts, products, objects, installed bases, and sold-to parties.

In the Incident, the service and response profiles can be flexibly determined from these objects based on a determination procedure.

Dates like “To Do By“ can be automatically calculated based on the service and response profile information.
When the due date of an incident, problem, or request for change is exceeded it can be escalated by a background action.

- Escalation level is increased
- Escalation date is set

The transaction can be escalated in two levels.

Escalations can be lowered by a manual action in the transaction.

- Escalation level is reduced
- Escalation date is deleted
Solution categories are used to classify problems, for example, as known error or problem caused by change. The solution categorization can be set after a final solution has been found. It has mainly reporting benefits to analyze the efficiency of the Problem Management.
Application Incident Management
Functions Based on Multilevel Categorization (1)

The incident / problem can be categorized on multiple levels with several categorization blocks.

- To “auto complete“ a Incident, the processor needs to select a categorization and the system can then find and copy a template which was assigned to this categorization.

- Problems with the same categorization as entered in the Incident can be proposed by the system when choosing “Find Related Problems“.

- Knowledge articles with the same categorization as entered in the Incident can be proposed by the system when choosing “Find Knowledge Articles“.
Application Incident Management
Example: Find Knowledge Articles (2)

‘Find Knowledge Articles’ finds knowledge articles which have the same categorization on header level as a incident, problem, or request for change.
Dispatching allows to assign a incident / problem to another employee or service team based on flexibly definable rules, for example if a help-desk agent cannot solve an issue remotely and wants to dispatch the incident to the 2\textsuperscript{nd} level support.

Rules for dispatching are set up in the Rule Modeler.
To help process the Incident, the processor can search for knowledge articles in the Incident:

- **Knowledge Articles assignment block**: Search for relevant knowledge articles via F4 help
- **Find knowledge articles** (from the “More“ button on header level): Proposes knowledge articles which have the same categorization as the Incident
- **Suggest knowledge articles** (from the Knowledge Articles assignment block): Proposes knowledge articles which are assigned to a category in the categorization schema
The system can automatically calculate the duration of an Incident.

Per default, two duration types are delivered:
Work duration: Calculates the time a transaction was in work, but not in status “Customer Action”
Total duration: Calculates the total time it took to complete the transaction

You can display durations in the Dates assignment block as well as in the Service Level Agreement assignment block.
You can configure the system so that you can create all sorts of transactions as follow-up of a Incident, for example a Request for Change:

![Follow-Up Transactions and Scheduled Actions](image)

You can schedule and execute actions in the Incident:
Application Incident Management

Related Transactions

In the Related Transactions assignment block,

- the system automatically updates links to transactions which are related to the Incident processing, e.g. the Interaction Record, a service contract, or a knowledge article which was created as follow-up of the Incident.
- you can manually add any further transactions which are relevant for the Incident to refer to them.

<table>
<thead>
<tr>
<th>Actions</th>
<th>Transaction ID</th>
<th>Transaction</th>
<th>Description</th>
<th>Transaction Type</th>
<th>Status</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36642</td>
<td>36642</td>
<td>Interaction Record</td>
<td>Open</td>
<td></td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>8000002178</td>
<td>8000002178</td>
<td>New_incident_8August</td>
<td>Incident (IT Service Mgmt.)</td>
<td>New</td>
<td>Very high</td>
</tr>
<tr>
<td></td>
<td>5006482</td>
<td>5006482</td>
<td>Service contract</td>
<td>Service Contract</td>
<td>Released</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9000003800</td>
<td>9000003800</td>
<td>Exchange DVD drive</td>
<td>Service Completion Conf...</td>
<td>Open</td>
<td>Medium</td>
</tr>
</tbody>
</table>
If object relationships exist for an object entered on the Incident‘s header, you can display the relationships from the Incident.
Application Incident Management

Processing Log

- The processing log provides a consolidated audit trail of changes made to a transaction
- Various log types are available for selection
- One type can be defaulted for viewing
- Changes to fields can be logged selectively

<table>
<thead>
<tr>
<th>Log Type</th>
<th>Log Action</th>
<th>New Value</th>
<th>Old Value</th>
<th>Updated On</th>
<th>Updated At</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executed Actions</td>
<td>IT_RFC_APPROVAL_WORKF...</td>
<td>Processed</td>
<td></td>
<td>27.09.2008</td>
<td>11:54</td>
</tr>
<tr>
<td>Executed Actions</td>
<td>IT_RFC_APPROVAL_WORKF...</td>
<td>Processed</td>
<td></td>
<td>27.09.2008</td>
<td>11:47</td>
</tr>
<tr>
<td>Status History</td>
<td>User Status Changed</td>
<td>Implementation</td>
<td>Approved</td>
<td>27.09.2008</td>
<td>11:44</td>
</tr>
<tr>
<td>Executed Actions</td>
<td>IT_RFC_APPROVAL_WORKF...</td>
<td>Processed</td>
<td></td>
<td>27.09.2008</td>
<td>11:44</td>
</tr>
<tr>
<td>Changed Fields</td>
<td>Total Duration of Service Transaction</td>
<td>2MINUTE</td>
<td>0MINUTE</td>
<td>27.09.2008</td>
<td>11:44</td>
</tr>
<tr>
<td>Status History</td>
<td>User Status Entered</td>
<td>Approved</td>
<td></td>
<td>27.09.2008</td>
<td>11:42</td>
</tr>
<tr>
<td>Executed Actions</td>
<td>IT_RFC_APPROVAL_WORKF...</td>
<td>Processed</td>
<td></td>
<td>27.09.2008</td>
<td>11:42</td>
</tr>
<tr>
<td>Transaction History</td>
<td>Incident</td>
<td></td>
<td></td>
<td>27.09.2008</td>
<td>11:54</td>
</tr>
<tr>
<td>Transaction History</td>
<td>Service Contract</td>
<td></td>
<td></td>
<td>27.09.2008</td>
<td>11:54</td>
</tr>
<tr>
<td>Transaction History</td>
<td>Confirmation</td>
<td></td>
<td></td>
<td>27.09.2008</td>
<td>11:47</td>
</tr>
</tbody>
</table>
Time Recording enables fast and easy entry of time spent working on a incident or problem:

Time record details can contain: Actual duration, employee responsible, service product quantity, service type, valuation type, etc.

Typically the user only needs to enter the actual duration and start time

If you have SAP CRM Service Confirmation Management activated, the system automatically creates a service confirmation item per entered time record

<table>
<thead>
<tr>
<th>Action</th>
<th>Product ID</th>
<th>Actual Duration</th>
<th>Time Unit</th>
<th>Start Date</th>
<th>Start Time</th>
<th>Employee Respondent</th>
<th>Created At</th>
<th>Confirmation ID</th>
</tr>
</thead>
</table>
To automatically inform agents about knowledge articles matching the service transaction‘s categorization, an alert can be set up:

From the alert, the agent can:
- access the list of proposed knowledge articles
- review the knowledge articles details
- send the knowledge articles via e-mail
The Attachment Assignment Block offers to upload any document from your hard disk or to link to existing documents in the content of the Knowledge Database. Any changes on attachments are saved in versions. It is possible to check in/check out documents of the attachment AB. A where used list shows all related documents where the attachment is linked to.
Application Incident Management
Business Role SOLMANPRO with SAP Solution Manager specific enhancements

The Business Role „SOLMANPRO“ is designed to process professionally incidents, problems, requests for changes and change documents. It substitutes the existing CRM role „ITSERVICEPRO“

The role includes functional enhancements and deep integration in ALM processes of SAP Solution Manager.

It runs integrated in the existing SAP ITSM functionalities, so typical SAP CRM or SAP ITSM functionalities can further be used.
In the Work Center Incident Management, you can easily define substitutions.

Who is substitute for me in a specific period and receive all my work items.

For whom I substitute in a specific period and receive all his work items.

Alternatively the substitution can also be set in the Business Partner Master data with relationships.
In the Assignment Block „Projects“ it is possible to assign any process / process step based on the Solution documentation (in transaction solar01).

Multiple assignments are possible.

If an incident was reported out of the Business Blueprint, the process assignment is automatically done.

You can e.g. display all incidents based on Business process search.
The Assignment Block „Sap Collaboration“ is used to create SAAp support messages.

It guides the user through several steps where at the end the incident / problem will create a corresponding message in SAP Support Backbone.

All the further communication with SAP can be done here.

Before sending a message to SAP we recommend to search in the SAP xSearch, which is search over all known SAP sources, such as SAP notes, SAP library, SAP SDN, etc.
• It is also possible to open a service connection to SAP and maintain login data, so SAP support employees can remote login and make an analysis.
• The guided procedure collects again all relevant data, that you want to send to SAP Support
• In case the priority is high or very high it would also be necessary to maintain Business consequences.
With a prerequisite check, it will be avoided that messages would not be created, because of e.g. a mismatch with the assigned S-user and installation number.

In the final step you get an overview about all data that would be send to SAP.

In the AB you also would confirm the SAP message and fill in the Positive Call Closure.
In the SAP Notes Assignment Block the Sap notes that has been attached in the SAP message will be displayed.

It is also possible to add manually SAP notes or to start the SAP Notes search on SAP Service Marketplace.
Application Incident Management
Text Management

- Better overview about text log history
- Use text templates (personnel or system templates)
- Maintain own text templates (personnel or system templates)
- Use filter to focus on specific text types
- Activate / Deactivate the display of the system context
- Increase / Decrease the text area
- Activate / Deactivate the Rich text formatting
Find detailed information about the related test case if the incident was created out of SAP Solution Manager Test Management in case of an test defect.

Use the Incident Management search to find all incidents related to an Testplan.
The Assignment Block shows the relevant Project or Solution and the process in which the Business Process Monitoring has detected an alert. Those alerts can automatically trigger to create an incident message.

In this AB it is possible to identify which Business process is affected and if you show the alert you will get further details of the monitoring alert.
If the 3rd party Web Service interface is activated to connect SAP Solution Manager to another Help Desk system, in this Assignment Block the synchronization per incident would be managed.

It is possible to be connected with multiple 3rd party systems

You can trigger manual actions, such as synchronize, send message, etc. here
Application Incident Management

Individual actions

- There are individual actions that are preconfigured in SAP Solution Manager. Most of them are bundled with conditions and are therefore processed in background.
- The actions that can be triggered manually could be performed in the Assignment Block „Scheduled actions“
- Alternatively the actions that start a method could also be triggered in the Menu bar.
- Customers can use the actions to realize individual steps in the support process
Application Incident Management
SLA Alerts & Escalation

- Definition of Service times
- Definition of IRT and MPT times based on priorities
- Maintain SLA relevant Status
- Automatic Recalculation of IRT/ MPT in case of Status- or Priority changes
- Percentage of left over time of reaction and processing time
- Definition of percentage level which is setting an additional escalation status
- Escalation triggers notification to an Business Partner (to specified which?).