

Efecte IT Service Management

Solution Description

Updated: 09/12/2022





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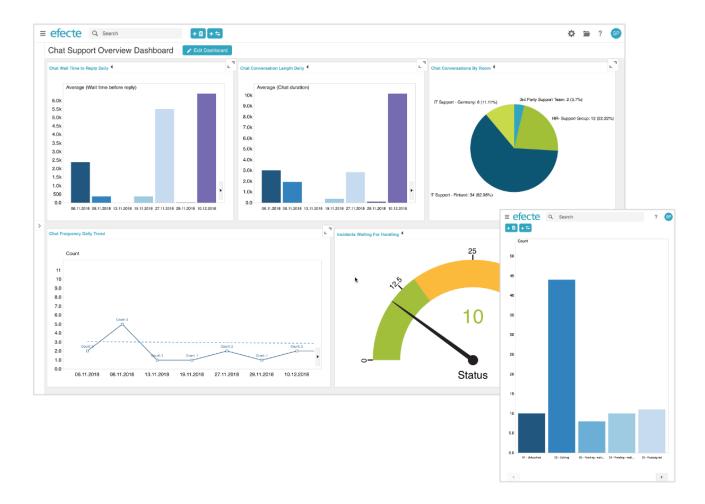


1 OVERVIEW

Efecte IT Service Management is a solution to modernize and automate an organization's IT service management.

The Efecte ITSM Solution includes

- · Service Management Practices such as incident, request, and change
- · General Management Practices such as demand, information security management, and supplier management
- Service Configuration Management in the Configuration Management Database Base (CMDB)
- Technical Management Practices such as Deployment Management



This solution description describes all the available features for IT Service Management that have been developed on top of the Efecte platform. The common capabilities of the Efecte platform are described in a dedicated document because several other solutions such as the HR Service Management solution are available on the Efecte platform.



2 SERVICE MANAGEMENT PRACTISES

The service management practices cover the more operational activities of ITIL, especially the IT Service Desk. They streamline the service operations through the interconnected incident, knowledge, change, and problem management.

The different service management practices are implemented in dedicated templates, workflows, and folders. However, the processes are not stand-alone activities. Almost all practices are connected with relationships – the so-called references, one way or the other with other practices. The networked processes enable to connect different practices to one interlinked network of services. The illustration below shows the possible relationships of a single incident in Efecte's Visual Analyser tool.

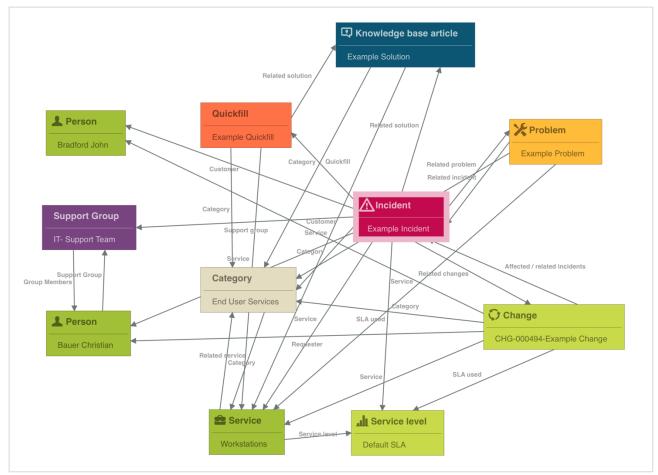


Image: Relationships of an incident displayed in Efecte's embedded Visual Analyser tool

The following chapters describes each practice on its own and lists the relationships to other templates.



2.1 Service Desk

The service desk implementation of Efecte follows PinkVerify and SERVIEW specifications for Incident Management. Service desk teams have different ways to visualize the current tasks at hand. Besides a dedicated list view for each support team, a Kanban Board can be a great way to visualize the current situation in service desk operations:

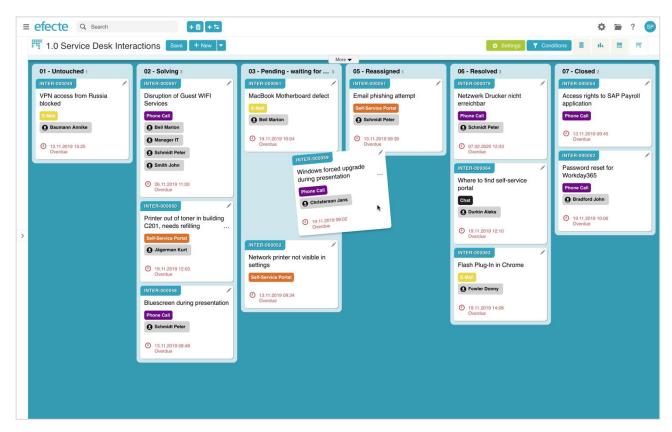


Image: Example Kanban Board for a service desk

2.1.1 Acknowledging Issues

Users have multiple choices on how to report issues, requests, and queries to the service desk:

- Writing an email to the service desk
- Reporting the issue in the enterprise self-service portal
- Calling the service desk
- Chatting with the service desk using the optional Efecte Multi-Room Chat

Public



Your issue: "Access to Intranet through VPN not possible" [#ID:INC-000434#] has been...



O servicedesk@efecte.com <servicedesk@efecte.com>

O Peter Schneider EFECTE Thursday, 28 March 2019 at 9.54

Show Details

efecte

Hello Peter,

thank you for contacting Efecte's Service Desk.

Your issue has been automatically recorded and has been assigned. Once we have classified your issue, we will be able to provide you with a target resolution time.

To assist our personnel in handling your issue, please include the job number [#ID:INC-000434#] in the subject line of all messages regarding this issue.

Best regards

Signature

Efecte Service Desk

Reporter: Schmidt Peter

Opened: Thu Mar 28 09:54:00 EET 2019

Short description: Access to Intranet through VPN not possible

Job number: INC-000434

Image: Example acknowledgement email sent automatically from workflow

Efecte ITSM provides different means to acknowledge an issue depending on the communication channel.

2.1.2 Processing Calls

A very common way to request support from the service desk has been traditionally to call a dedicated service desk number. For this basic use case, service desk agents need to fill in the incident data manually. The efficiency of handling support request from calls is increased in the solution by:

- Integration of the customer base reducing the time to enter the reporter's detail
- Integration of the CMDB reducing the effort to identify the affected configuration item
- Power user button available from anywhere in the UI to open an incident independent of what the agent was doing at the time of the call
- Optional call center integration automatically selecting the user or displaying previously reported issues

2.1.3 Processing issues reported through self-service portal

The reporting through the self-service portal is easy for users through the guided user experience, the icon-based UI design, and providing dynamically CMDB information of the user's assets.

The solution supports online issue reporting on a dedicated, browser-based self-service portal with 2-level categorization. Categories can be used for directing the issues to appropriate support queues or service providers to improve time to solution.

The self-service portal can provide suggestions to users for solutions to their incidents or answers to their questions based on related knowledge base articles already when describing the issue. This might resolve issues already before they are even reported to the service desk.



The status of an issue, the service desk person handling the case, and the issue number are exchanged between the service desk and the self-service portal allowing end users to see in when their issue is likely to be resolved. In addition, users can make comments on an open issue, find out how the issue was resolved, and cancel an issue.

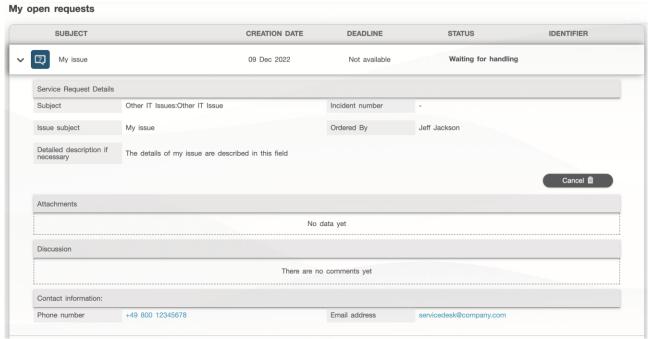


Image: Issue status tracking in self-service portal

2.1.4 Default Issue Configuration on the Self-Service Portal

The below illustrated issue reporting categories are pre-configured in each Efecte ITSM solution delivery.

These issue categories can easily be amended and modified by the self-service portal administrator. Each issue category has the following or a similar report form pre-configured:



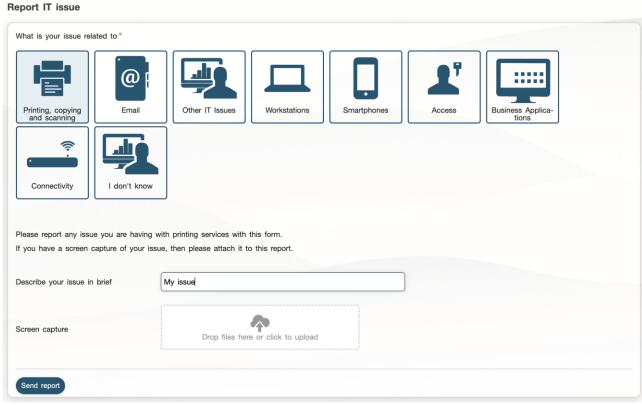


Image: Issue reporting on the self-service portal

2.1.5 Processing Issues Reported through Email

One of the most common ways to report issues is sending an email to the service desk to a dedicated email inbox. The solution can read such an email inbox, automatically create an issue from it while mapping subject, sender, and body text to the corresponding attributes and optionally send automatically a confirmation message to the reporter.

Efecte ITSM records issues by default in an incident template because incidents are the most common type of issues. Issues can be recorded to different folders (just like folders in a file management solution) according to service desk team, issue type, location, sensitivity, or other criteria. Read access, update rights, and delete rights can be restricted according to business requirements.

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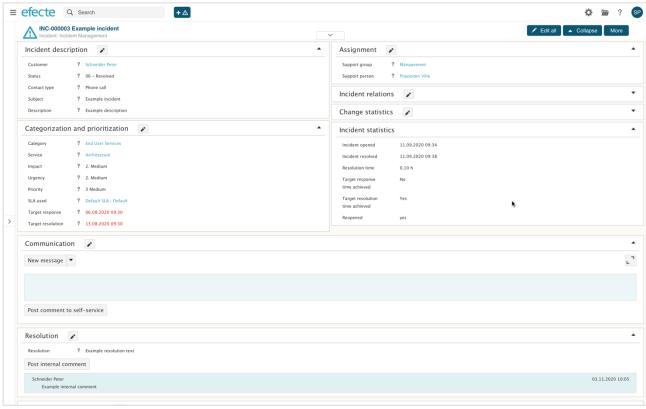


Image: Detail view of an incident

2.1.6 Classifying Issues

An issue can be one of three different types: incidents, requests, or queries. When a new issue is being reported then the service desk should classify it according to the agreed guidelines in the organization.

2.1.7 Assigning Issues

Ultimately, every issue should have an owner to create clarity on who is responsible to handle it. Support persons can assign issues to themselves by the click of one button. Assigning of issues can also be automated when they created in the self-service portal according to the support domain. Optionally, the solution can analyze the subject of the email and categorize the incident automatically accordingly to different support groups.

2.1.8 Actioning Issues

Actions to process issues depend on the classification. Incidents are processed according to the Incident Management Practice. Requests are processed according to the Service Request Management practice.

There is no dedicated process in the Efecte ITSM solution for handling queries separately. Understanding the question, finding an answer anywhere in the organization, and communication the answer back to the user can follow the incident management practice as it includes the same steps to be performed by the service desk.



2.2 Incident Management

Once an issue is classified as an incident, then it is processed according to the Incident Management practice. The goal of Incident Management is to restore normal business operations as quickly and efficient as possible. Incidents are processed according to the configured workflows in the service management tool.

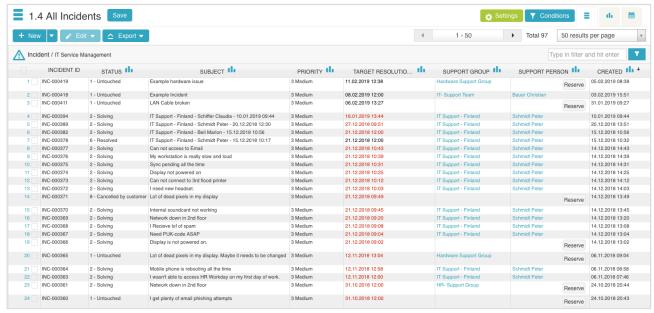


Image: All incidents list view in compact viewing layout

2.2.1 Diagnosing Incidents

Knowledge base articles with known issues and their solutions can and should be used to make the diagnosis quicker. Knowledge base articles can be linked to the incident. Agents can write work log entries to record what they have done with the incident. Work log entries are recorded with time stamp. Work logs help teams to keep track of issues and analyses across different people working on the incident.

Incidents can also be re-assigned to other support levels or more information can be requested from the reporter. All actions and changes in the incident will be automatically recorded and can be audited in the history at a later point of time.

If incidents can be solved with a temporary work-around, but the root cause still exists, then the incident can be transformed to a problem for further root cause analysis in another process, potentially by another team. Information from the incident is automatically pre-filled into the problem record according to the configured mapping of data.

2.2.2 Investigating and Solving Incidents

Resolving of incidents efficiently is supported by a variety of technologies in the solution:

- Using frequently used responses or solutions with the quick-fill feature (also called "canned responses")
- Using solution descriptions from the knowledge base and copying the solution texts immediately to the resolution field
- Grouping of incidents related to the same major issue (such an email service outage) to parent incident
 and resolving them automatically when the parent issue is resolved

Notifications about the resolution of the incident can be sent automatically by email to the user or alternatively, depending on the reporting channel, can be displayed in the self-service portal. Updating of fields such as the status field can be automated using the workflow engine. Closing of the incidents after a configurable time-out unless the reporter wishes to reopen the case can also be automated with workflows.



2.2.3 Identifying Similar Incidents with Artificial Intelligence

The Efecte ITSM solution can suggest similar incidents that occurred in the past using Natural Language Processing to the support agent. The support agent can recognize duplicate incidents, identify known solutions, and even notice potential major incidents with this functionality. This separately licensable functionality of displaying similar data cards can be used in the detail view of the incident.

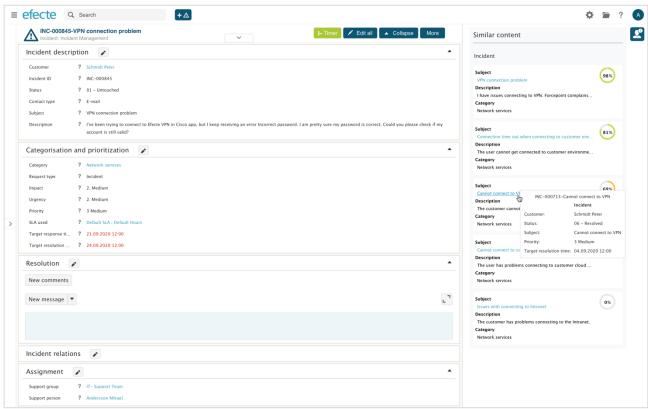


Image: Similar issue suggestions in Virtual Coach area

The similar incidents suggestions are a feature of Efecte's Virtual Coach concept. The Virtual Coach needs to be activated in the user's profile setting by each support agent. Data cards which have similar content than the currently edited data card, based on few fields such as the subject of an incident and the description, are displayed in order of similarity.

By selecting the button with the Al-Assistant icon, the user can view the similar issues in templates defined for comparison by the administrator such as incidents and knowledge base articles.

The similar incidents are shown in the order of similarity. The degree of the similarity is shown as percentage value on the right side beside the issue.

2.2.4 QuickFill / Canned Responses

Certain incidents occur frequently and the actions of the service desk for each case are similar. The Efecte ITSM solution provides a functionality allowing support persons to record typical incident descriptions, the usual support group, and the usual resolution text which is called sometimes also canned responses. With few clicks, the incident can be processed using the QuickFill record.

2.2.5 Linking Child Incidents to Parent Incidents

Incidents can be linked to other incidents in the advanced service desk implementation if they are all caused by the same issue, and they all have the same resolution. In such case the incident that has been recorded first serves as parent incident and all other subsequent incidents can be linked as child incidents.

If this method is used, then all child incidents are updated with a solution text and with the status of the parent incident automatically.



2.2.6 Managing Major Incidents

Major incidents that impact many users or have a dramatic impact on business operations might need a bigger team to solve it quickly. The Efecte ITSM solution has an optional class and attributes for handling such special circumstances in the advanced service desk implementation. Users can record the team working on the issue and the Incident Manager. An additional worklog provides means for collaboration in the major incident team.

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2.2.7 Supervising Incident Management

Supervising of incident management is convenient and at the same time powerful in the Efecte ITSM solution. Default dashboards over standard ITIL KPIs can be adjusted. All reports show live data and can be accessed also from mobile devices (with exception of dashboards that don't scale to mobile devices).

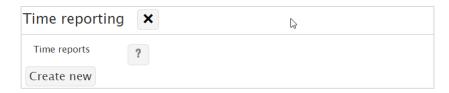
Based on business requirements, escalation rules and notifications can be added to the workflows to keep the supervisor in charge. Assigning or re-assigning of incidents to other agents can be limited to supervisors.

2.2.8 Tracking Incident Resolution Performance

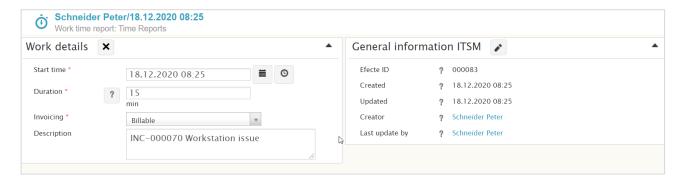
The solution tracks automatically the performance of teams and if required support persons in accordance to service level agreements assigned to the different categories.

2.2.9 Time Reporting

The Time Reporting feature allows support persons to log time they have used on incident. This gives visibility for how much time is used for billable and non-billable work on each particular incident.



Support persons are able to log start time, duration of work, billability and also description. Duration is automatically rounded up by 15 minutes.



Multiple time report records can be created on incident.





2.2.10 Prioritizing Incidents by Impact and Urgency

In the advanced service desk implementation, the Efecte ITSM solution automatically calculates the priority of an incident using the following matrix:

Urgency / Impact	High	Medium	Low
High	Critical	Critical	Medium
Medium	High	High	Low
Low	Medium	Low	Planning

2.2.11 Default Views for Incident Management

Name of the View	Purpose	
Incident Dashboard	Displays a variety of operational information including:	
	Bar chart: All incidents by status	
	Stacked bar chart: All incidents by status created today	
	 List view: All Incidents from start of this month Response time achieved 	
	 List view: Open Incidents from start of this month 	
	Status indicator: First pass resolution	
	 List view: All Incidents created today by priority 	
Open Critical Incidents	List view of all open incidents with priority "Critical"	
Open Incidents by Support Group	List view of open incidents in a selected support group	
Incidents Late on SLA	List view of incidents that are late on either response or resolution targets	
Statistics	Includes statistical information about incidents.	

2.2.12 Default Flow for Incidents

The flow is designed for an incident management process with mostly manual actions.

By default, the process is triggered independent of the channel as long the status is set to new.

- 1. The incident is created (portal, email, manually from a phone call, etc.)
- 2. The first activity is the automatic sending of an email receipt with the incident number to the customer that the incident has been recorded.
- 3. When the status is set to resolved, an email is sent to the customer with the resolution text.
- 4. A feedback request is sent to customer.
- 5. Incident status is set from resolved to closed.

If the incident is reopened from resolved, then the flow can restart from any status (except closed), however the feedback request is sent only once per incident flow.

The following automations are running continuously on any incident, even if it has been reopened or it is going several times through a particular stage of the incident process. The following automations are created as event-based actions.

The automations will automatically:

Send an email to the last support agent if another support assigns the incident to her-/himself.

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- Send an email to the members of the support group if the support group has changed.
- Send an email to the queue manager of the support group if the deadline approaches 5 hours before the resolution target time.
- Send an email 12 hours after the issue has been resolved to request feedback to the service received.
- Change the status of the incident from resolved to closed after 7 days.

Additional automations can easily be added. For example, assigning incident automatically to a support group based on the category and/or the service.

2.2.13 Default Templates for Incident Management

The section below illustrates the default templates that are available for incident management. Templates are tables for storing all relevant data. The default templates for incident management process are:

- Incident template Includes incident related information such as categorization, customer info, agent assignment, communication, time tracking, resolution information, and linkage to other relevant templates.
- Announcement template Information related to announcement creation such as subject, message, publication date, attachments, etc.
- Work time report template Information related to tracking agent work time for the related incident.
- Email content template Predefined content for emails sent to users.
- Task Template Information related to tasks that are required to resolve an incident.
- Chat session template Template for conversation logs for Efecte's Multi-Room Chat add-on.

For more information on templates, please refer to the Efecte Platform Description document.

2.3 Service Request Management

Service request management is the heart of every IT Service Management solution. The Efecte ITSM solution delivers flexible request management including an easy-to-use self-service portal to initiate and track requests.



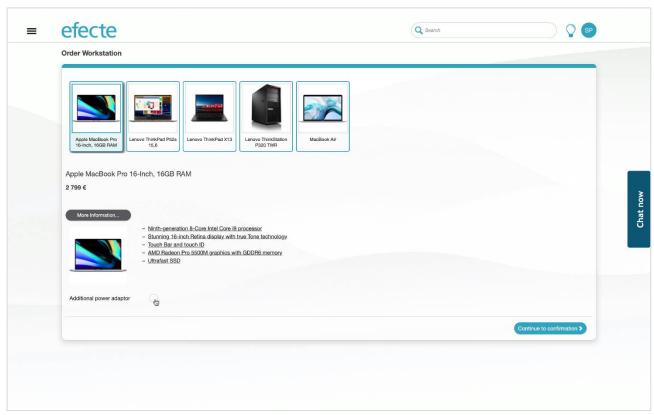


Image: Example service catalog representation in the self-service portal

The solution supports two slightly different ways of handling service requests. The first one is meant for service requests made via Efecte's self-service portal and the second for other requests, which are recorded directly in the Service Management Tool.

The self-service portal includes complete web shop functionality. Anything from smartphones, through software up to business cards can be ordered. Approvals can be set, and cost-centers assigned for cost tracking.

The self-service portal has a shopping cart functionality. Multiple service catalog items can be ordered in a single transaction.

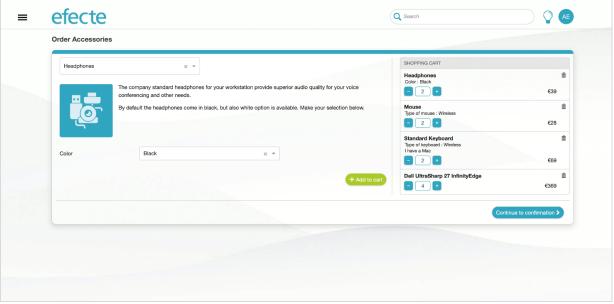


Image: Shopping cart example in the self-service portal



Additional information about the service item can be provided to a link to an external source. Any data that is necessary to process the order such as the service item options, dates, or free text can be added to each item in the catalog. All additional information can be assigned to dedicated attributes in service management tool. Filtering of choices based on other attributes can be implemented also to simplify the ordering process. Help text up to 300 characters that describes the service item more in detail can be provided to the user when hovering over the corresponding icon.

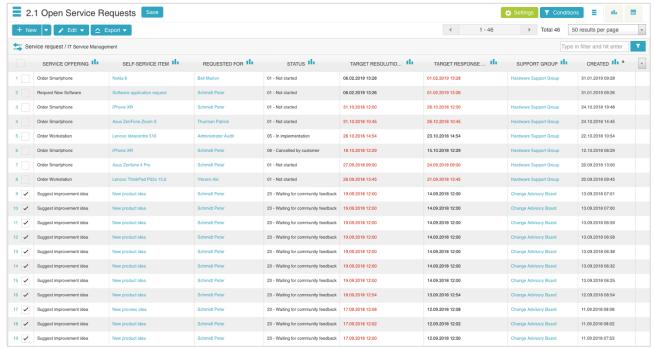


Image: Open Service Requests view in default layout

Superiors can be included in the service request process as approvers. Once a service request is pending approval an email notification is sent to the manager who can decide whether to approve the request or reject it. Approvals can be delegated to other known users during absences or leaves keeping operations running smoothly. The approver can define to whom and for which date range to delegate the approval. The approval delegation feature can be activated for the entire portal for data privacy reasons if necessary.

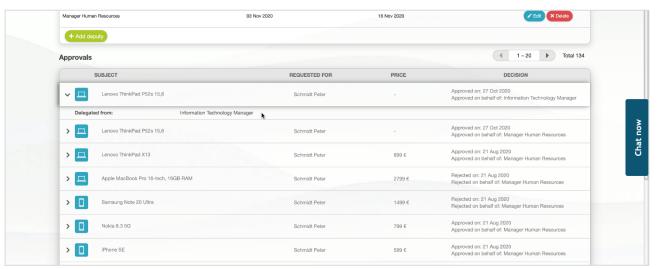


Image: Example approval view in the self-service portal

2.3.1 Service Requests for a Quantity of Items in a Single Order

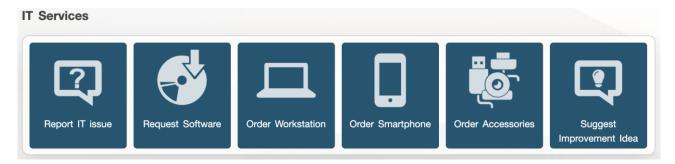
It is possible to request a quantity of the same item in the same order. The quantity can be selected during the order process. The quantity will be displayed in the confirmation page and the request status information.



The feature is available for single service item orders and for shopping cart orders for multiple service items.

2.3.2 Default Service Offerings Configuration in Self-Service Portal

Any Efecte ITSM solution comes with a default configuration that allows customers to provide services from first day onwards. Typically, the service offerings do dependent on the customer's service catalog. Initially, the following service offerings are pre-configured:



2.3.3 Default Views for Service Request Management in Service Management Tool

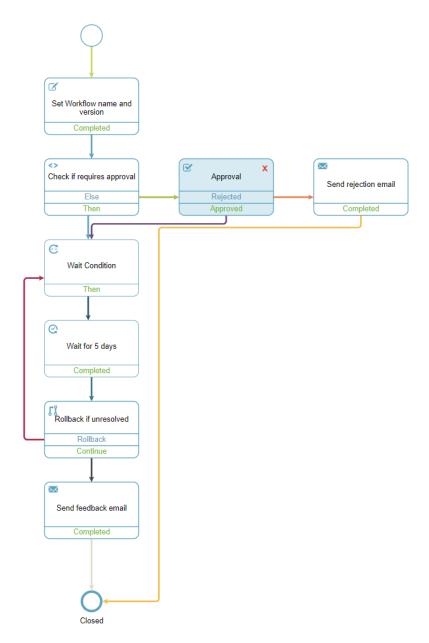
Name of the View	Purpose
Open Requests	A list view of all open request
Open Requests Opened This Month	A list view of all open requests made during the current month
Open Requests by Support Group	A bar chart of all open requests in a particular support group
Demand by service offering	A bar chart visualizing the demand per service offering
Trend line of service requests / week	A line chart for service request trend

2.3.4 Default Workflows for Service Request Management in Service Management Tool

In the standard delivery, the Efecte ITSM comes with pre-made workflow for service requests. The workflow should be adjusted according to the service catalog in use.

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The workflow is triggered if the status is set to "Not started" and the Service Offering name in the self-service portal is listed in the workflow selection criteria. The workflow automation can be cancelled at any time by setting the status to "Cancelled by customer" or "Cancelled by support".

- 1. The first activity of the workflow is to change the status to "Check if requires approval".
- 2. The next activity is the financial approval by the manager of the person the item is requested for. If the manager rejects the request, then the workflow sends a notification to the customer and ends the workflow.
- 3. If the manager approves the request, status will be changed into "Approved" and support team can progress the request further.
- 4. Next the workflow will wait for the support team for the resolution of the request
- 5. When the request is resolved the automation sends an email notification to the customer including a request to provide feedback and completes the service request.

2.3.5 Default Templates for Service Request Management

The following default templates that are available for service request management:



Service Request - Contains information related to ordering data (requested for, cost center, price, approver, etc.) and data required to process the request and other information for statistical purposes (impact, site name, customer feedback, resolution, etc.)

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Service Request Bundle - Contains information related to a service bundle which is formed from one or more service requests (includes links to the individual service requests, bundle ID, total price, etc.)

2.4 **Problem Management**

The goal of the Problem Management process is to reduce the number of incidents in IT services and infrastructure, and to provide solid workarounds and solutions for recurring incidents.

There are several tasks performed to achieve this. The proactive aspect of problem management is concerned with identifying sources of new problems before incidents occur. The reactive side is more concerned with resolving significant single incidents or reoccurring incidents. The solutions are documented as known errors in order to be used for similar incidents.

Problems can be identified from several sources. The most common of these is the incident management process, which receives error reports from the end customers. Significant single incidents or ones that reoccur frequently can be escalated as problems. Problem management should also perform proactive work in order to identify issues that could cause incidents in the future. This can be done, e.g., by analyzing trends and patterns in the IT infrastructure and services. Sometimes also developers and vendors of hardware and software report identified faults, errors, bugs, security issues, etc. Those should also be recorded as problems. When starting to solve the problem; first a workaround should be developed, whenever that is possible. The workaround gives ends users the possibility to continue their work, while the root cause of the problem and a more

Key functionalities:

- Create solutions for recurring incidents
- Identify and remove root causes of known errors
- Link problems to knowledge base

consistent solution are being explored.

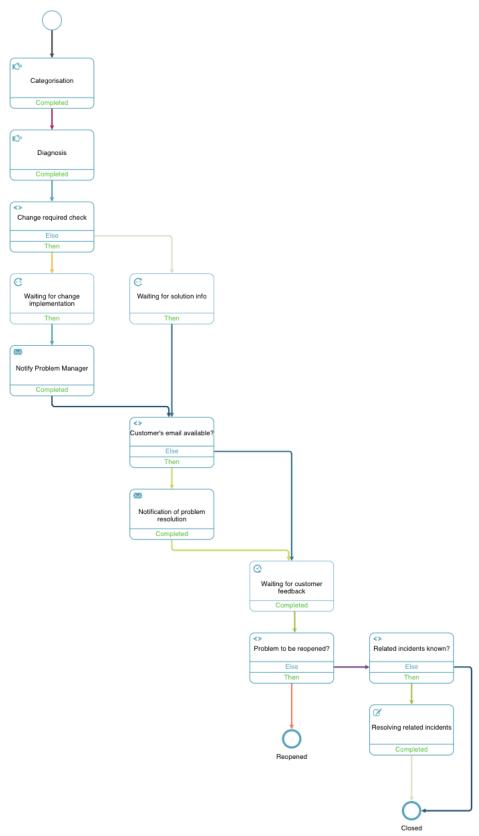
- Analyze incident trends: Identify causes of problems before incidents occur
- Improve service quality by measuring service areas with frequent problems

2.4.1 Default Views for Problem Management

Name of the View	Purpose
Open Problems	A list view that shows all open problems
Open Problems Assigned to My Team	A list view that shows all open problems assigned to the support person's team
All Problems	A list view that shows all problems, also closed ones
Open Problems by Service	A bar chart visualizing problems per each service
Open Problems by Status	A bar chart visualizing number of problems with different statuses



2.4.2 Default Workflow for Problem Management



The workflow is triggered by creating a new problem and setting the status as "New". The workflow automation can be cancelled at any time by setting the status to "Cancelled".



- The first workflow node will automatically create a task for the categorization of the problem assigned to the service desk level 2. Once a category and a Problem Manager has been assigned, then the workflow moves to the next step.
- 2. The next workflow node will automatically create a second task assigned to the service desk level 2 for the root cause analysis. Once the status of the problem is set to "Closed" OR a *Resolution* text exist OR a *Solution* has been linked OR the *Root Cause* exists OR *Change that caused this* exists then the workflow moves forward to the next activity.
- 3. If the problem requires a change to be implemented the workflow will wait until the related change is in status "Closed". If not, then the workflow will wait until the status of the actual problem is "Resolved". Once the change is closed then a notification will be sent to the Problem Manager.
- 4. The next note is sending an email to the affected customer that the issue has been resolved including the solution description if the email address is known. The email also includes an invitation to give feedback to the work of the service desk.
- 5. Next the workflow will wait for 7 days whether the customer wants to reopen the incident and/or the problem.
- 6. If the customer request that the incident is reopened, then the workflow automation is stopped, and the incident shall be completed manually. If the issue is not reopened, then the incident is automatically set to status "Closed" and if a related incident is known then its status will also be set to "Resolved".

2.4.3 Default Template for Problem Management

The default template for problem management is called "Problem". It includes the information about related incidents, assets, and services. Information also includes problem description, categorization, prioritization, assigned personnel and all relevant info needed to solve the problem.

2.5 Release Management

Release Management is the process of managing the planning, building, and testing of new software or hardware assets. Release managers have the means to plan the creation of new releases for the enterprise infrastructure linking them configuration items, problems, incidents, and/or change management records.

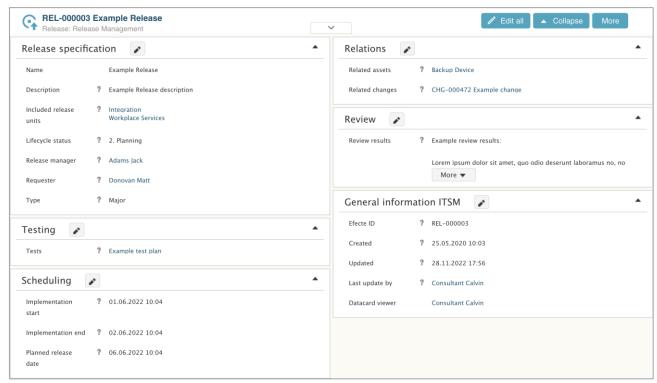


Image: Detail view of one example release

Release statistics enable the Release Manager to create reports and analyze the releasing process in order improve future activities.



2.5.1 Default View for Release Management

Name of the View	Purpose
Release Management Kanban	Shows Kanban view of all releases with their relevant statuses.
Open Releases	A list view that shows all releases which are active.
Tests	A list view of tests in the system.
Test Cases	A list view of test cases in the system.
Test Suites	A list view of test suites which are a collection of test cases.

2.5.2 Default Template for Release Management

The default template for release management is called "Release". It includes the information about relations (assets, problems, incidents, etc.), release information, testing, scheduling, etc.

2.6 Change Enablement

Change Enablement aims to ensure that standardized methods and procedures are used for efficient handling of changes of product and services in IT. Organizational changes involving the people aspects of transitions should be handled by another General Management practice of Organizational Change Management.

The Change Enablement practice controls the changes done in hardware, software, access rights, and processes used for running your operations. The objective of the Change Enablement practice is to ensure that changes are recorded and then evaluated, authorized, prioritized, planned, tested, implemented, documented, and reviewed in a controlled manner.

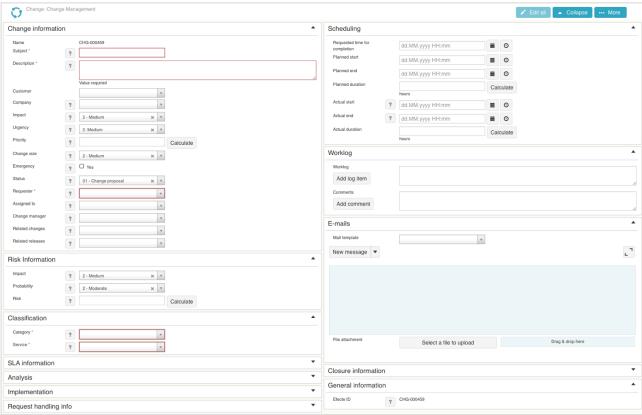


Image: Detail view of one change request

The solution includes a variety of pre-configured workflow automations for different kinds of change requests. The following chapters describe the default configuration of these. The default configuration includes three workflows: one for emergency changes, one for normal changes, and one standard changes. Normal and emergency changes are recorded using the "Change" template. Standard changes and its dedicated workflow are managed in a dedicated "Standard changes" template.

Public



Key functionalities:

- · Record all changes in single place
- Create an implementation plan of a change
- Give work and cost estimates of a change
- Split implementation of a change to tasks, each of which can be assigned to a single person or team
- Ensure that every change is authorized, based on given plans and estimates
- Track the progress of change implementation
- Create a set of standard change templates
- Use reporting to support reviewing implemented changes to develop your change implementation process

The default change processes follow the statuses defined by ITIL.

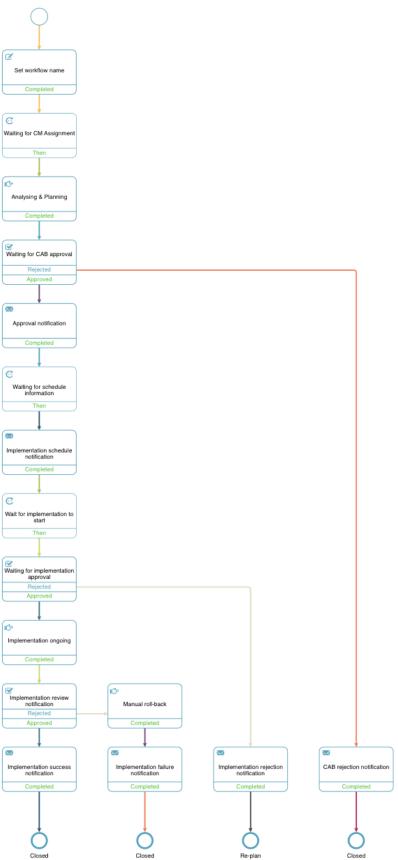
2.6.1 Default Views for Change Enablement

Name of the View	Purpose
Change Enablement Dashboard	Displays a variety of operational information
Change Management Kanban	A Kanban view of the changes with their relative statuses
Open Emergency Changes	List view displaying all open emergency changes
My Open Changes	List view displaying open changes assigned to the user
Open Changes	List view displaying all open changes
Open Standard Changes	List view displaying all open standard changes
Change Management Tasks	List view: displaying all open tasks which need to be performed
Planned Changes This Month	calendar view displaying changes planned for this month
Statistics	Statistics related to changes



2.6.2 Default Workflow for Changes

The workflow is triggered when the status is set to "Change proposal" and the emergency attribute has no value.





- 1. The first workflow activity waits until the change request has been assigned to a person. The status will be set to "Analysis".
- 2. The next workflow node creates a task for the Change Manager Team to analyze and plan the change. The task will be considered to be completed when an implementation start date, a work estimate, a cost estimate exists. When completed, the status will be set to "Waiting to approval".
- 3. The next workflow activity is an approval request to the Change Advisory Board. If the change is rejected, then the requester receives a corresponding email notification, and the change is closed. If the change is approved, then the status is set to "Approved".
- 4. If the change was approved than the workflow will send an email notification to the requester including the responsible Change Manager.
- 5. The next node creates another approval for DevOps for the implementation. If rejected, then the requester receives a corresponding message. If the implementation is approved, the implementation approval status is set to "Approved".
- 6. The node waits until the implementation starts and implementation end dates have been set and sets the status to "Planned".
- 7. The next activity notifies the requester of the implementation schedule.
- 8. Then the workflow creates the implementation task for the DevOps team. The task is considered completed when the task status is set to "Closed (Complete)". Once the task is completed then the status will be set to "Waiting for review".
- 9. The next node will send a notification for the change manager to review the implementation.
- 10. In the next step, the implementation review will lead to the approval or rejection of the change implementation. If the change is considered to have failed, then a manual task to roll-back the changes will be created, the implementation review result will be set to "Failed" and the requester will be notified.

If the change implementation is approved in the implementation review, then the requester is informed of the successful implementation, the review result is set to "Successful" and the change request is set to "Closed".

2.6.3 Default Templates for Change Enablement

The following default templates that are available for change enablement:

- Change Information about required data for change planning and implementation (Risk, Classification, Statistics, Closure information)
- Standard Change Information about changes that occur frequently and can be managed with a more simplified template compared to the normal Change-template.
- Standard Change Content Standard Change content is recorded to this separate template to make reuse easier.



2.7 Monitoring & Event Management

Monitoring and Event Management helps organizations to track the status of assets and services across the IT infrastructure. Typical events are alerts from assets in the infrastructure signaling malfunctions such as lack of capacity or loss of network connectivity. Events may be detected by a configuration item sending a message, or by a management tool.

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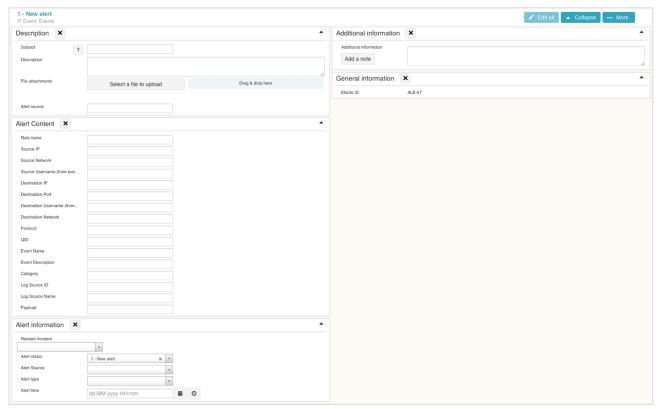


Image: Detail view of one event

Key functionalities:

- Logging of events
- Classification of events
- Reporting and automatic notifications

2.7.1 Default Template for Monitoring and Event Management

The default template for Monitoring and Event Management is called "Event". It includes the information about event source, destination, relations, alerts, etc.

Public



2.8 Service Level Management

Service Level Management is the process of ensuring the quality and availability of enterprise services according to Service Level Agreements (SLA).

Service Level Management provides for continual identification, monitoring and review of the levels of IT services. Service Level Management ensures that arrangements are in place with internal support-providers and external suppliers. The process involves assessing the impact of change on service quality and SLAs. One of the essential aspects of successful service level management are flexible and easy-to-read reports and automated escalation procedures ensuring continuous service improvements as well quick corrective measures.

Service Level Agreements can be defined for different priorities and per service. The solution automatically calculates the priority based on impact and urgency, picks the service level for the service, and checks calculates the performance based on the recorded business hours for the service desk.

The solution can automatically assign an incident to the correct service level. The service level is used for defining the incident's target response time, which in turn allows monitoring and reporting of actual incident resolution times and comparison against agreed service levels.

As a result, the Efecte ITSM solution can provide detailed reports and control over the service support performance. It offers a clear view to how well the SLAs have been met and gives IT the tools to measure and improve service quality. Service levels allow IT to ensure that the services it provides correspond to the service levels agreed with the customers.

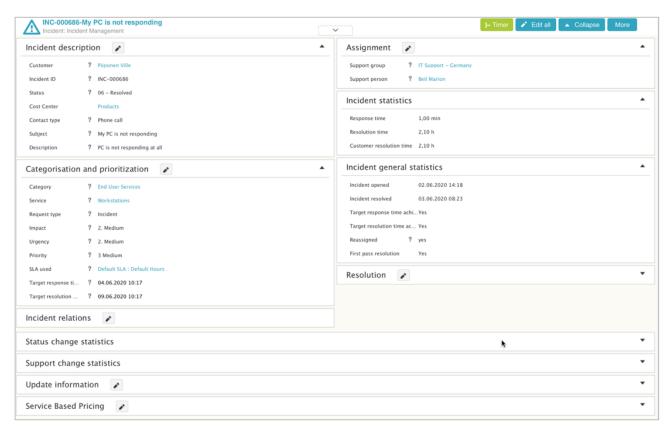


Image: Incident example with service level data

The perceived quality of service can be measured through service rating in the self-service portal. The context-specific service experience rating helps service and vendor managers to not only measure the quantitative performance according to SLAs but also the qualitative performance as perceived by end-users. Whenever a service is completed the end user has the option to rate the service performance, which is recorded in the solution for reporting and follow-up purposes.

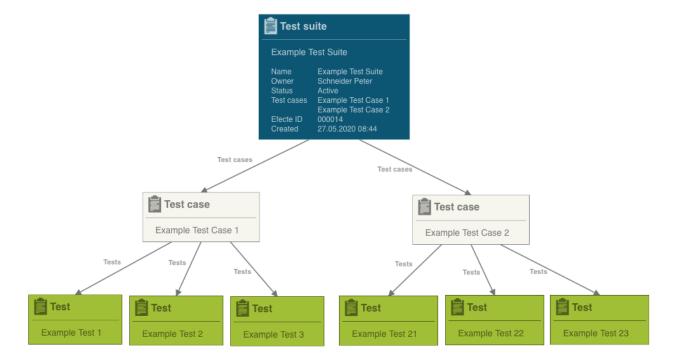


2.8.1 Default Template for Service Performance Management

The default template for Service Performance Management is called "Service Level". It includes performance related information about response and resolution, etc.

2.9 Service Validation and Testing

Many service lifecycle activities such as Change Enablement, Release Management, and Deployment Management include testing actions. In order to manage testing activities consistently and group them to meaningful sets, the Efecte ITSM solution includes a set of testing-related templates. These various testing entities can be used to perform anything from a single test to large-scale test suites including a variety of test cases.



Quality Engineers, Product Owners, or DevOps teams can plan and monitor tests with the test plan. The test plan includes information on who is doing what and when. The test plan also presents the progress of the testing activities as well the results of the tests.



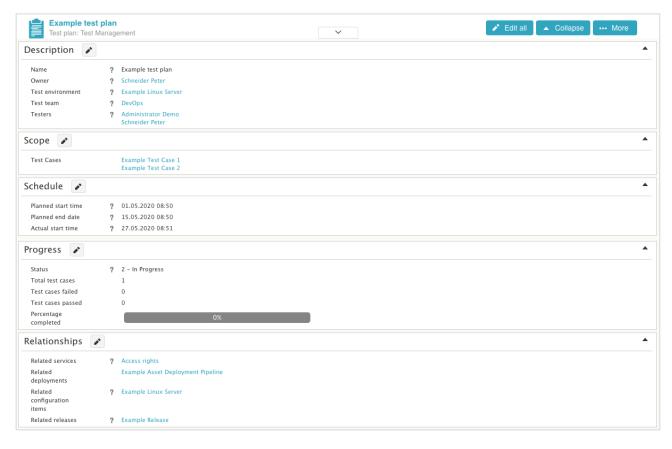


Image: Example Test Plan

When a set of default tests should be used several times in Releases or Deployments then a Test Task template can be used.

2.9.1 Default Templates for Service Validation and Testing

The default templates for Service Validation and Testing are:

- Test Information about individual tests (Acceptance criteria, status, steps, results, etc.)
- Test Case Information about individual test case (status, prerequisites, assignment, related tests, etc.)
- Test Suite Collection of test cases (owner, description, status, etc.)
- Test Plan Information about planned test cases (environment, team, schedule, tester, progress, related items, etc.)
- Tests Template Information about tests which will be copied for each release and/or deployment (list of tests, general info, etc.)



3 GENERAL MANAGEMENT PRACTISES

3.1 Information Security Management

Information security management describes activities that an organization needs to implement to ensure that it is sensibly protecting the confidentiality, availability, and integrity of assets from threats and vulnerabilities.

The Efecte ITSM solution supports Information Security Management with a dedicated Security Incident Management process support and dedicated workflows for general security incidents and incidents impacting data privacy according to the GDPR.

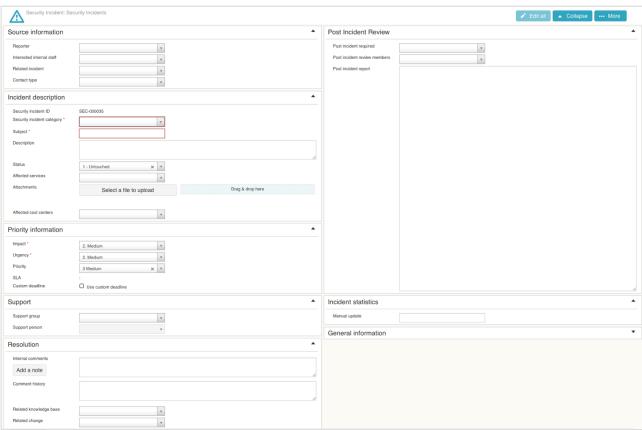


Image: Detail view of security incident in edit mode

The solution enables to manage service-specific information security issues such as the recording of security audit reports, known weaknesses, and security requirements in the Service template:



Image: Details in the Information Security class of the Service template

Public



3.1.1 Default Templates for Information Security Management

The default templates for Information Security Management are:

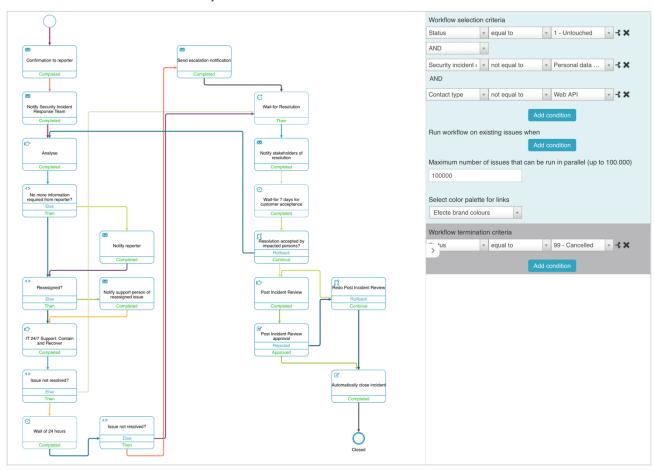
- Security Incident Information about the incident itself (source, priority, working team, resolution, post incident-review, etc.)
- Security Requirement Information about the security related requirements (description, impact, countermeasures, owner, risks, CIs, etc.)

3.1.2 Default Views for Information Security Management

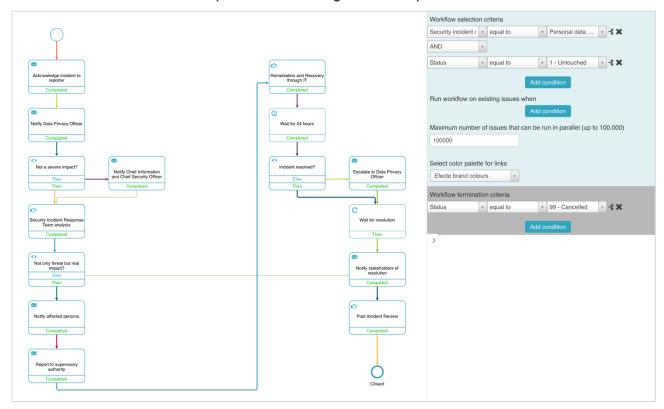
Name of the View	Purpose	
Security Incident Dashboard	Dashboard providing an overview of current security status	
Unassigned Critical Incidents	A list view that shows all open critical security incidents that haven't been assigned	
Security Incidents Waiting for Handling	A list view of all new security incidents	
All Security Incidents	A list view that shows all open security incidents	
Tasks for SIR Team	A list of tasks that are open for the SIR (Security Incident Response) team	
Data Privacy Officer Dashboard	 Dashboard providing an overview of issues in different categories: Security incidents categorized as GDPR violations in the last 24 hours Security incidents categorized as brute force attacks in the last 24 hours Security incidents categorized as phishing attempts in the last 24 hours Trend line of security incidents categorized to be related to data privacy 	
Statistics	Statistics about security incidents	



3.1.3 Default Workflow for Security Incidents



3.1.4 Default Workflow for Security Incidents Covering Data Privacy





3.2 Knowledge Management

The service desk allows organizations to create, sort, search, and publish knowledge base articles. Service desk users can use knowledge base articles to find quicker known solutions to frequently occurring incidents. Knowledge base articles can also be used to manage any knowledge that is worthwhile to store and publish across the organization such as guidelines, strategies, and best practices.

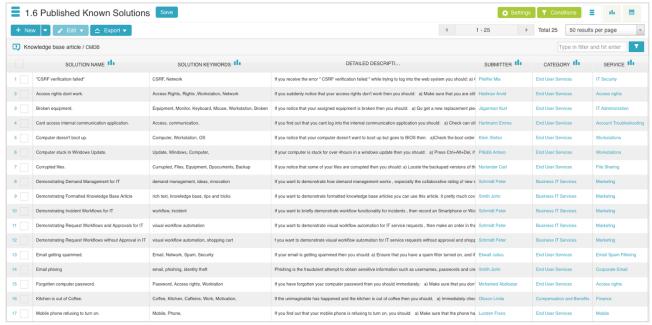


Image: List view of knowledge base articles

Users can assign knowledge base articles to different categories such as hardware, software, network, email, etc. Efecte IT Service Management automatically records timestamps for the creation time and latest update time of a knowledge base article. Knowledge base articles can be linked later to incidents.

Knowledge base articles can be published on the self-service portal allowing end users to find solutions to known problems themselves reducing the workload on the service desk. The knowledge base articles are published on self-service portal according to the support categories assigned to the solution.



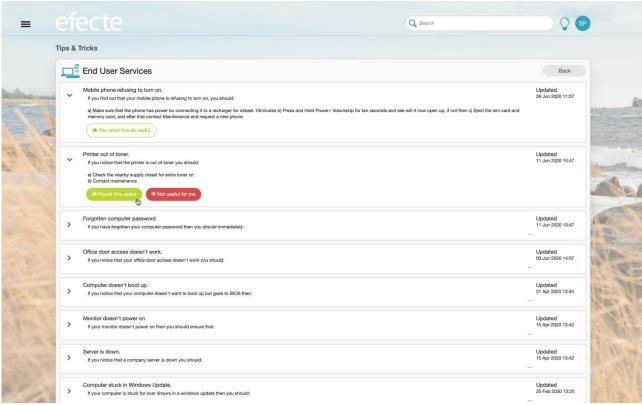


Image: Knowledge base article in self-service portal with usefulness rating

With careful categorization of articles, the employees are provided with intuitive and familiar view to articles: articles can have some basic HTML formatting and contain links to external resources for videos, documents and other.

Because the value of each knowledge base article is based on how users perceive the usefulness and how often users are viewing the information, the Efecte solution measures both quantitative as well quality feedback on each knowledge base article allowing Knowledge Managers to identity which topics have the strongest impact and which articles might need an update.

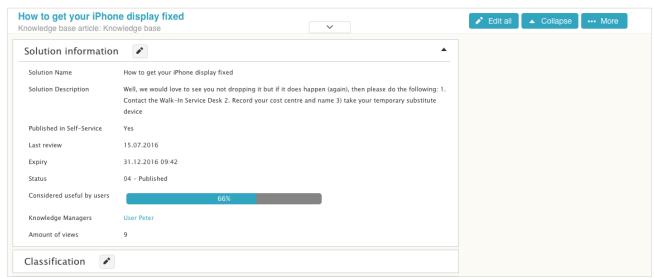


Image: Detail view of knowledge base article



3.2.1 Default Template for Knowledge Management

The default template for Knowledge Management is called "Knowledge base article". It includes information about the article itself, categorization, people responsible for it, visibility in Self-Service and for certain AD-groups, etc.

3.3 Project Management

The ITIL 4 Foundation document describes project management in IT as: "The purpose of the project management practice is to ensure that all projects in the organization are successfully delivered. This is achieved by planning, delegating, monitoring, and maintaining control of all aspects of a project, and keeping the motivation of the people involved." Efecte's ITSM solution supports the Project Management practice by:

- Allowing users to record relevant project data for planning and delegation purposes
- Supporting the monitoring of projects with Kanban Boards
- Enabling the co-ordination of multiple projects on calendar views
- Providing means to list individual tasks of each project as separate entity
- Offering the capability to store default tasks for repetitive projects

The name, the content, the status, the project team members, the project manager, the start and the project end date end can be recorded for each project.

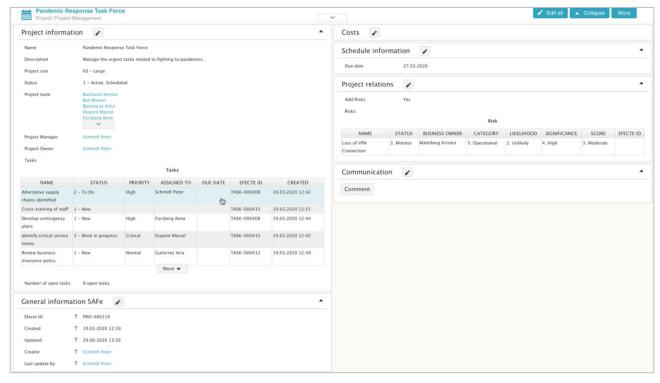


Image: Example project details

Every user with the necessary permissions can add oneself to the project as a watcher. Whenever the status of the project changes then the watchers are informed with an email of the corresponding change.

Any number of tasks can be linked to a project. Each task includes information on what the task is, who is assigned to perform it, and when it is expected to be done.

While completing the task, users can leave behind comments regarding the task.

The progress of a project can be followed on a Kanban Board which displays the status of each task in the project.



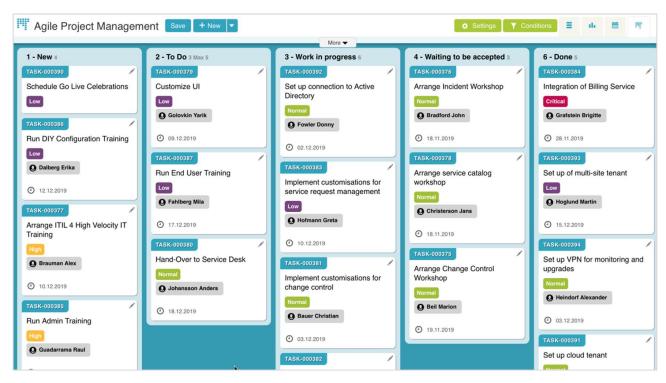


Image: Example Kanban board of a project

Task templates with default tasks can be created for projects which always contain the same tasks every time it is started. This reduces the need to create these default tasks manually every time. The task template contains only the task template name and the associated default project tasks.

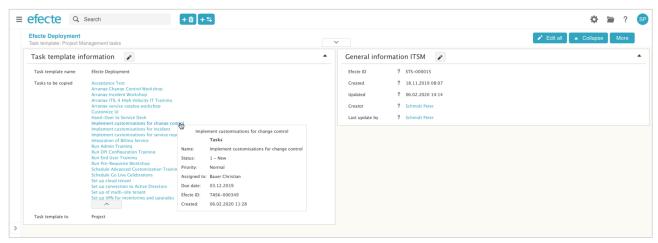


Image: Example task template of a project

A calendar view helps project managers to understand other parallel running projects which may impact another project.



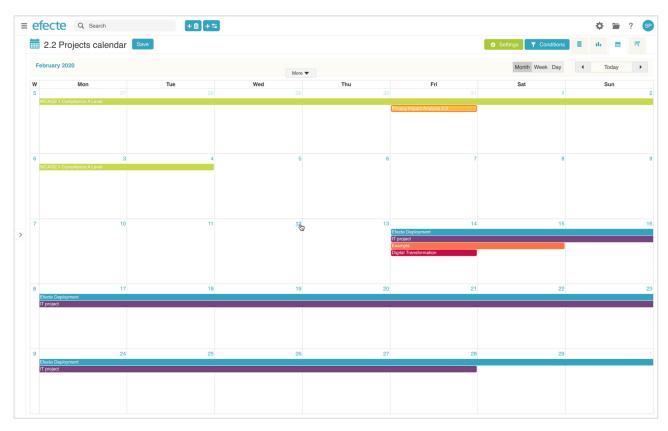


Image: Example calendar view

3.3.1 Default Views for Project Management

Name of the View	Purpose
Project Task Board	A Kanban Board of all tasks of all projects; can be customized to show only tasks of a particular project
All Project Tasks	A list view showing all tasks of all projects; can be customized to show only tasks of a particular project
All Project Task Templates	A list view showing all task templates of all projects
Project Calendar	A calendar view to all projects according to their start and end date
Projects Kanban	A Kanban Board showing all recorded projects according to their current status
All Projects	A list view of all projects that have been recorded

3.3.2 Default Templates for Project Management

The default templates for Project Management are:

- Project Information about the project itself (team, schedule, financial info, status, related tasks, communication, etc.)
- Project subtask Information about specific tasks in the project (description, status, watchers, schedule, assignment, etc.)
- Project task template Set of subtasks to be copied between separate projects

3.4 Relationship Management

The practice of Relationship Management helps organizations to manage the connections and dependencies between customers and service providers, services and service providers, as well internal and external organizations.



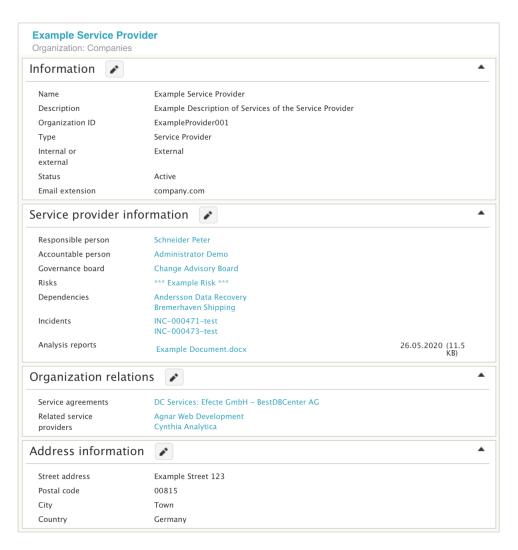


Image: Example Service Provider Information in the Organization Template

Service and Partner Managers can store service provider organizational, governance, performance, and risk information related to individual service providers in Efecte's ITSM solution. Organizations can be classified and linked to each other allowing Service Managers to create maps of dependencies.

3.5 **Demand Management**

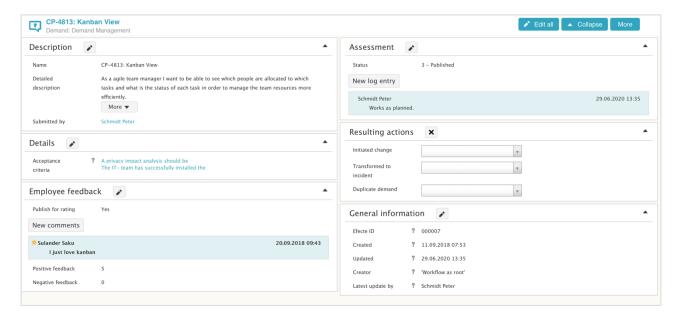
The purpose of the demand management functionality is to record and process new ideas, change requests, or innovations.

New demands can be recorded including information that is needed for the analysis such as:

- A detailed description
- The goal (which is typically related to the benefit)
- Level of secrecy (for innovations for example)

Typically, a Demand or Innovation Manager reviews the suggestion and translates the demand to a list of requirements, also called Acceptance Criteria in the agile way of working.





Different financial estimates and associated risks should be recorded during the analysis of the demand.

The idea or change suggestion can be published to all users on the self-service portal for rating and comments as an additional input for the analysis of the demand. If the Demand Manager decides to publish the idea on the self-service portal, then the description will be visible to all users of the self-service portal where users can decide whether they like or dislike the idea.

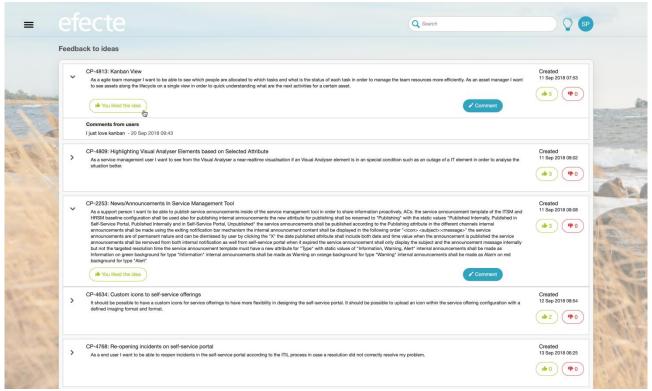


Image: Example idea to be rated on the self-service portal

The resulting actions such as change request or incident can be linked to the demand record in order continue the processing of the demand in line with the ITIL processes.

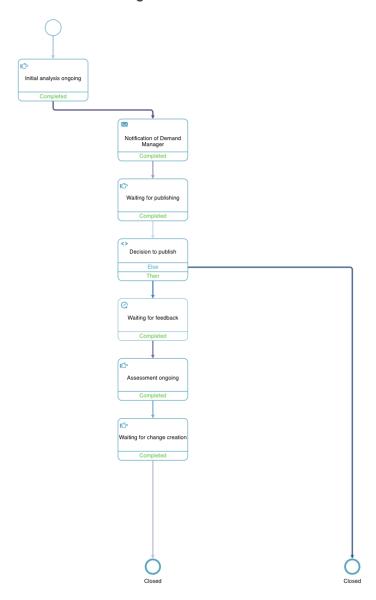


3.5.1 Default View for Demand Management

Name of the View	Purpose	
Demand Management Kanban	A Kanban view of all demands categorized by statuses	
Open Demands	A list view that shows all demands which are active	

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3.5.2 Default Workflow for Demand Management



3.5.3 Default Template for Demand Management

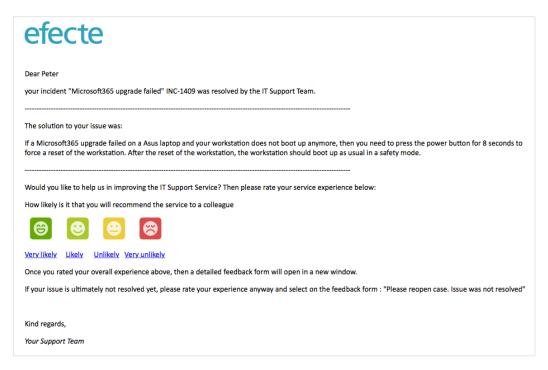
The default template for Demand Management is called "Demand". It includes information about the goal, acceptance criteria, user story, feedback, assessment and actions.

3.6 **Customer Satisfaction Measurement**

Understanding how customers – typically employees and other end users – of an ITSM solution is the foundation for Continuous Service Improvement. Efecte ITSM includes a feedback application which can collect feedback from the customers immediately when the service is completed. Feedback can be collected for incidents and/or service requests.

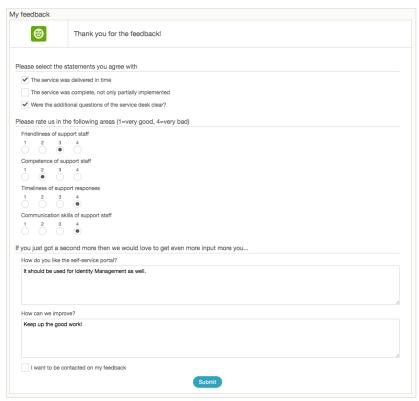


The feedback action can be triggered at any stage of a workflow. Typically, the feedback is requested after a service is delivered or an incident is resolved. The email includes for examples emoticons which, when clicked, send the choice of the end users directly back to the solution.



Furthermore, when clicking at one of the choices for the feedback, the end user is automatically forwarded to the self-service portal where they can give more detailed feedback if they choose to do so.

The results of the employee feedback can be displayed in a multitude of reports and dashboards ranging from simple numerical scoring to the details of the feedback form.



The feedback form can freely be configured by the administrator of the self-service portal.



3.6.1 Default Template for Customer Satisfaction Measurement

The default template for Customer Satisfaction Measurement is called "Feedback". It includes information about the customer communication, fulfillment, rating, qualitive and quantitative feedback.

3.7 **Risk Management**

The IT organization must manage systematically the risks of various processes. Risks can be linked to security requirements, changes, releases and other activities.

3.7.1 Default Template for Risk Management

The default template for Risk Management Measurement is called "Risk". It includes information about the risk itself, owner, status, categorization, impact, probability and response.

3.8 Service Financial Management

Service Finance Management helps organizations to control, allocate, and improve cost efficiency of enterprise services. The Service Finance Management application keeps track of costs per service, cost center and/or vendor. Flexible dashboards help to monitor cost development in real-time. Cost center-based allocation enables shared services across the organization.

Key functionalities:

- Tracking of costs of selected services and assets
- Allocation to cost centers and services

The financial management of IT-related costs is enabled in the solution by

- Recording a budget for a defined period (such as a month or a guarter)
- Accounting of the actual costs from incident, request, and change management
- Charging the costs through integration to external invoicing solutions

Budgeting and accounting can be done for a cost center, for a service, or for both. The cost for incident processing is done based on the hours that have been required to serve the customer (alternatively a fixed price per incident can be charged by configuration change). The cost of a request is calculated by the price of the item in the service request. The cost of a change action is based on an hourly implementation price.

The solution accounts in periodic cycles - such as every hour - how much of the budget has been used. If the budget is exceeded, then an automatic email notification to the cost center owner can be sent. In addition, a budget tolerance can be defined in percentages to accommodate for some flexibility.



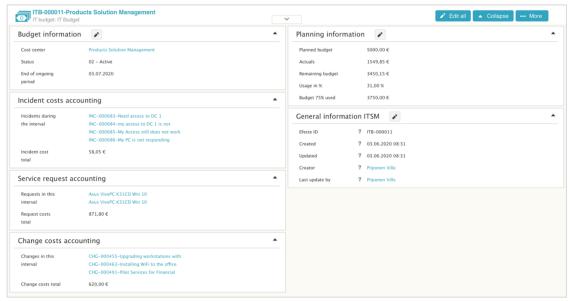


Image: Example IT Budget data card for one period

3.8.1 Default Template for Service Financial Management

The default template for Service Financial Management is called "IT budget". It includes information about the budget itself, changes, cost center, service, financial period, financial tracking, and other related costs.

3.9 **Supplier Management**

Supplier management is an increasingly important application for IT Service Management due to the more dynamic nature of enterprise services being outsourced, multi-sourced, and insourced. The System Integration and Management (SIAM) framework is defined as an approach to managing multiple suppliers of information technology services and integrating them to provide a single business-facing IT organization. The pre-integrated, seamlessly linked nature of the solution makes the supplier management one of the most powerful in the industry.

Key functionalities:

- Single point of record for all vendors and suppliers
- Pre-integrated license and agreement management
- Performance rating based on end user feedback
- System Integration and Management-ready multi-vendor access management
- Performance management for service level agreements and resolution times
- Schedule supplier audits and record the results



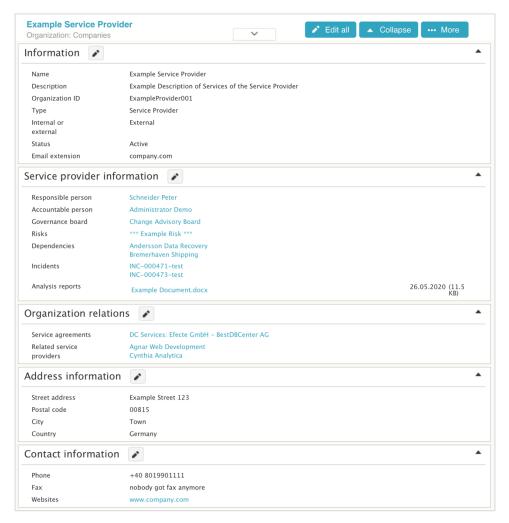


Image: Example supplier information details

Suppliers are recorded in the Organization template which is part of the Efecte Platform. For more details on the Organization template, please refer to the Efecte Platform documentation.

The Efecte ITSM solution can automate supplier audits in periodic intervals. A Supplier Audit record card stores the information related to a particular supplier audit.



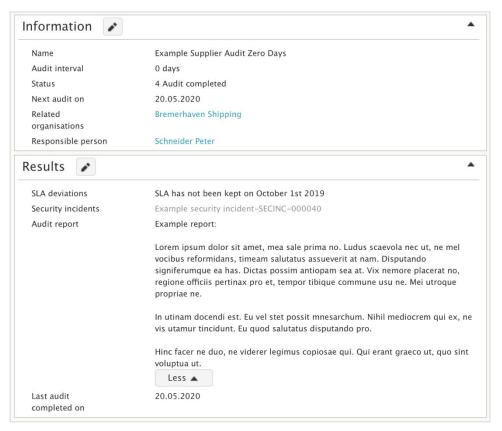


Image: Example supplier audit record card

3.9.1 Default Templates for Supplier Management

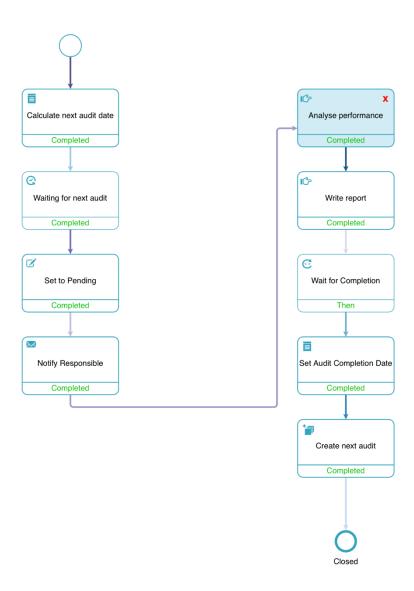
The default templates for Supplier Management are:

- Supplier Audit Information related to auditing the supplier (general audit information, related persons and organizations, security incidents, invoicing information, etc.)
- Agreement Information related to agreements with external and internal parties (contract information, is
 the agreement with internal or external party, internal party info, opposing party information, validity,
 notifications, finance reporting, related documents and/or contracts, etc.)
- Organization Information about the organization related to the Supplier Management process.

3.9.2 Workflow for Supplier Audits

The following workflow automates the security audits for a particular organization once the first supplier audit record has been created:







4 SERVICE CONFIGURATION MANAGEMENT IN THE CMDB

Service Configuration Management is the management and traceability of every aspect of a configuration from beginning to end. Real-time configuration management enables the efficient utilization and localization of enterprise assets. Configuration management and especially the management of relationships between configuration items improve the ability of IT Operations Managers to understand the dependencies and impact of single assets.

The Configuration Management Database (CMDB) provides a holistic view of the enterprise assets. The flexible nature allows organizations to create their desired templates for asset and configuration management. The self-service portal can pull real-time configurations item information from the Configuration Management Database for concise incident reports and service requests. The Visual Analyzer shows immediately the relationship of any configuration item to processes, individuals, and other assets.

Key functionality includes:

- One centralized storage for all IT asset, application, and service information
 - o Detailed information over your IT
 - Record workstations, servers, printers, network devices, backup devices, and mobile devices
 - o Manage asset, application, and service lifecycles through status changes
 - o Role-based user permissions for versatile and flexible user rights definition
- Define the services your IT is offering
 - Add service details such as service status, scope, and ordering instructions
 - o Include attachments such as manuals and service descriptions
 - Include financial information in terms of service costs and service pricing
 - Define service relationships with business processes and application installations
 - Define your service levels and their details
 - o Define service options (optional service components) and their pricing
- Detailed asset information
 - Save technical information
 - o Enter and track costs
 - o Record and track owner and user information
 - o View relationships between assets and applications
- Detailed application information
 - o Manage application and integration ownership and responsibilities
 - o Manage information about integrations and other dependencies between your applications
 - Manage application dependencies to assets, for example to physical and virtual servers
 - Manage application dependencies to services
- Extensive reporting
 - Allocate assets and their costs to organizational units, cost centers, or locations
 - o See what workstation models, hardware, and software configurations are used
 - Receive threshold level reports, for example, on low hard drive capacity
 - Communicate service statuses, costs, pricing and other details to your management and business associates
 - Estimate the effect or business criticality of a service component, such as an application or a piece of
 - Provide background information for service cost-benefit analysis
 - Visualize your service, application, and asset dependencies
- Configuration audits
 - o Define and schedule configuration audits
 - Record results of configuration audits
 - Take measures to mitigate the results of configuration audits



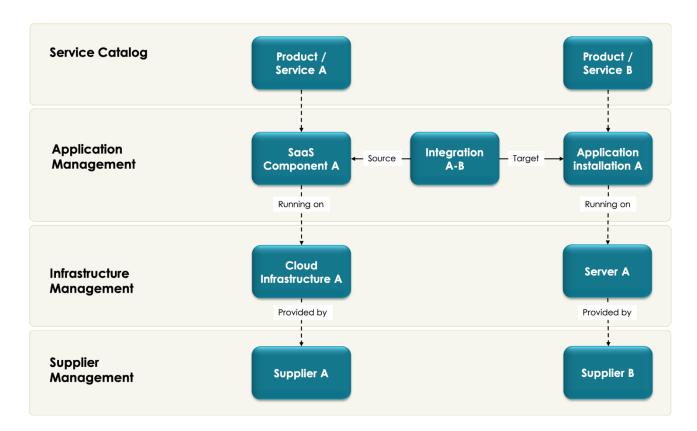
The solution includes an extensive list of pre-configured Configuration Items making it possible to deploy a CMDB quickly. Each template includes a series of attributes that describe the Configuration Item. The templates also include readily made automations for typical automations such as software license management or device lifecycle management. Relationships between different templates such as Device Model and Mobile Device are delivered out of the box.

Any Configuration Item (CI) template can be customized easily by the administrator without impacting the upgradability of platform.

The values of each CI can be inserted by various means such as:

- · One time import from a file
- Dynamic imports through discovery tools
- Manual entering of data in the Workspace

Conceptually, as outlined in the illustration below, Product or Service A is enabled by the SaaS Component A running in Cloud Infrastructure A. In addition, SaaS Component A acts as a source for an integration providing data for the Application A running on local server in this hypothetical hybrid architecture.





4.1 Service Catalog Management

The CMDB contains a set of default services and service categories, which help you to get started with your Service Catalog. We strongly recommend that you start building your Service Catalog on these. Of course, you will have to go through the default cards, fill in your preferences and replace the example data with actual data from your specific environment. In addition, you may need to add a category or two to cover the characteristics of your specific IT environment.

4.1.1 Service Categorization

Default services do not include business services, as those are depending on the organization. Instead, the default services mostly fall into the category of standard IT services, which are similar in most organizations. In any case, you should study what has been the level of service definition in the default services and use that as a guideline in your Service Catalog when you are creating new services.

Service categorization helps reduce the overall complexity; in addition, the categorization is utilized in the service desk to help link service requests and incidents to services.

There are four main categories:

- Business IT Services
- IT Services
- Technical Services
- End user services

Business services are mostly (but not always) business applications and often distinctive to a business process. Business delivers considerable input for IT regarding the development of these services. Business services are generally not available for all users.

4.1.2 Service Description

Describing the services that are available to end users is a crucial part of every IT organization. Efecte ITSM solution helps to describe the services with pre-defined structures in templates. The templates not only record the characteristics of the specified service, but also helps to manage the complete life cycle of it. Life cycle information can also include about financial information, security related information, and information about the relationships between services.

Most templates in the CMDB include a shared class called *General Information* recording the unique ID, the time of creation, the last update time, the creator, and the person saving the last update of the Configuration Item. The optional workflow status attribute can be used to make the current workflow status visible in reports/views for the corresponding Configuration Item.

4.1.3 Service Items

End users can order service items in the self-service catalog from the service catalog. A service item is always belonging to a particular category and service which speeds up the processing of the service request. The service items can be described and managed with the templates described below.

4.1.4 Default Templates for Service Catalog Management

The default templates for Service Catalog Management are:

- Service Information related to describing the service (relationships, supplier, ownership, financials, availability, continuity, information security, etc.)
- Category Information related to categorization of the service (description, support group, etc.)
- Organization Information about the organization offering the service (contact, agreements, etc.)



- Self-Service item Information about the service available through self-service portal (description, price, SLA, status, classification, etc.)
- Application Information related to specific applications (description, privacy, environments, services, recovery, integrations, etc.)
- Task Information about recovery actions related to the service (description, responsibilities, references, etc.)
- Service level Information about the agreed service level for the service (response time, priority, etc.)
- Agreement Information about agreements for the service (validity, financials, contracts, etc.)
- Person Information about persons related to the service (business owner, service manager, etc.)

4.2 IT Asset Management

The first step in implementing effective IT asset management is the automatic discovery of software, hardware, and network information. If there are assets that cannot be inventoried automatically, the information is entered into the system manually.

The lifecycle management of the assets is performed through status changes. The status of the asset can be tracked from the point of arrival through the start of use and maintenance periods, to the disposal of the assets.

4.2.1 Default Templates for IT Asset Management

The default templates for IT Asset Management are:

- Device model Information related to device models of workstations, mobile, devices, servers, and displays (manufacturer, vendor, availability, list price, warranty, device model, etc.)
- Workstation Information related to describing workstations such as tower, desktop, and laptop computers (ownership, purchase/leasing information, warranty, network settings, cost center, etc.)
- Display Information related to display of the device (model, ownership, purchase/leasing information, warranty, etc.)
- Cloud Infrastructure Information related to cloud infrastructure elements (server, database, location, supplier, availability target, etc.)
- Server Information related to characteristics of servers in the IT infrastructure (ownership, location, server type, environment type, public IPs, ownership, usage time, purchase/leasing information, warranty, CPU/Memory/Disk/other hardware information, etc.)
- SIM Information related to SIM card details (Phone number, operator, user, status, etc.)
- Mobile device Information related to a mobile device, such as a smartphone or a tablet (model, IMEI, ownership, warranty, purchase/leasing information, network settings, etc.)
- Printer Information related to describing printers (ownership, model, share name, purchase/leasing information, warranty, network settings, etc.)
- Network device Information related to describing network devices (ownership, model, network settings, purchase/leasing information, warranty, etc.)
- Network Information related to the network (name, gateway, IP space, LAN, etc.)
- Drive Information related to drive configurations (drive letter, volume name, size, filesystem, etc.)

- Storage Information related to storage devices (name, storage space, type, etc.)
- Database Information related to databases in the IT infrastructure (ownership, version, database name, type, running on, etc.)

- Backup device Information related to backup devices (ownership, model, number of backup drives, purchase/leasing information, etc.)
- Document Information related to stored documents including attachments (title, identifying information, confidentiality, status, file reference, ownership, etc.)

4.3 Software Asset Management

Software Asset Management is in today's digital world the crucial application keeping track of software versions and software licenses across the enterprise infrastructure. Software Asset Management (SAM) centralizes installed software information and matches it against existing license contracts. The SAM application helps to rationalize software investments, prevents over-purchasing, minimizes license compliance issues, and enables software reuse.

Software Asset Management is the practice of integrating people, processes, and technology to allow software licenses and usage to be systematically tracked, evaluated, and managed.

The Software Asset Management application centralizes installed software information and matches it against existing license contracts. The application helps to rationalize software investments, prevents over-purchasing, minimizes license compliance issues, and enables software reuse.

The basis for SAM is established by performing an automatic software inventory over all installed software. From the results of the inventory, the software to be monitored is selected. Inventory tool can be e.g. Microsoft SCCM. Specific software matching filters can be used, e.g., when minor versions of the software are preferred to be included within a major version.

To maintain, support, and ensure the quality of the software asset management process, software policies should be defined and implemented throughout the organization. The procedures should include issues like checking in new software, removal of outdated or non-utilized software, handling of expiring license contracts, and removal of unwanted software.

Key functionalities:

- Access all installed software information in one centralized place
- Collect all license agreements in one centralized system
- Get alerts of ending license agreements
- Get alerts when the number of software installations exceeds the existing licenses
- Report license compliance
- Track software installations by organizational units, cost centers, or locations
- Link cost, technical, and administrative information to software information

The solution includes a Plug & Play connector to the Microsoft SCCM discovery tool. Other discovery tools can easily be integrated through modern web interfaces.

4.3.1 Default Templates for Software Asset Management

The default templates for Software Asset Management are:



- Software license Information related to generic license information (type, cost center, ownership, license pool, etc.)
- Software license pool Information related to license pool, which includes licenses of the same software (administered software, number of licenses in the pool, used licenses, etc.)
- Software usage Information related to amount of usage software gets in time and level (time, usage count, usage hours, installation, usage level, etc.)
- Monitored software installation Information related software which is installed and monitored (installation information, usage level, installation location, identification information, references to software and license pool, language, etc.)
- Administered software Information related to administered software (name, monitoring info, filters, SCCM rules, etc.)

4.4 Availability Management

The availability of a service can be managed with dedicated Service Availability Forms. These forms, which are intended to be created for a particular time interval such as a calendar month, can be filled in for critical services for which the availability shall be precisely documented.

A Service Availability Form is always related to one Service which also holds a back-reference to all Service Availability Forms to calculate KPIs that span over multiple time intervals.

The solution automatically calculates if the overall service availability target (in percentages) has been met. The solution also calculates automatically whether the uptime commitment has been met. If either the scheduled or unscheduled downtime exceeds the permitted range recorded in the Service template, then the outcome is documented in the data card.

An automatic email notification is sent to the business owner and service manager of the Service if one or many availability commitments are violated.

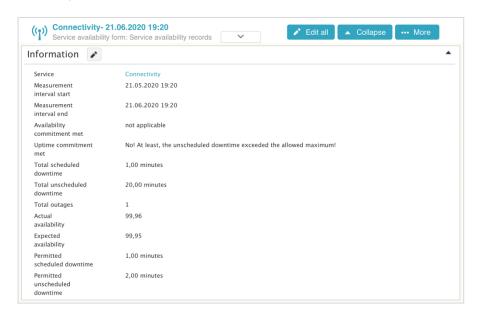


Image: Example Service Availability Form

Long-term indicators such as Mean Time Between Failures are calculated for each service taking into account all recorded Service Availability Forms.



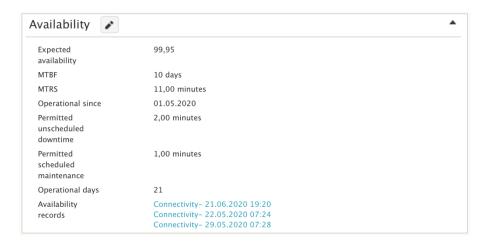


Image: Example Availability Class Details in Service Template

4.4.1 Default Template for Availability Management

The default template for Availability Management is called "Service availability form". It includes information about measurement dates, availability, scheduled and unscheduled downtime, number of outages, and other related information.

4.5 Capacity Management

Capacity Management allows Service and DevOps Teams to record, plan, and forecast capacity demand and capacity performance of individual Configuration Items. The focus of Capacity Management in the Efecte ITSM solution is on capacity planning and resource allocation. Real-time capacity monitoring can be integrated to the solution from external monitoring solutions.

The key asset for Capacity Management in the Efecte ITSM solution is the Capacity Allocation template. The Capacity Allocation template is designed to record information for a particular Configuration Item for a defined time interval.

Service Managers can request capacity from the IT infrastructure teams in terms of CPU cores, memory, and storage. Additional capacity dimensions can be added by configuration through the administrator.

DevOps teams can assign the capacity allocation to a particular customer or cost center.



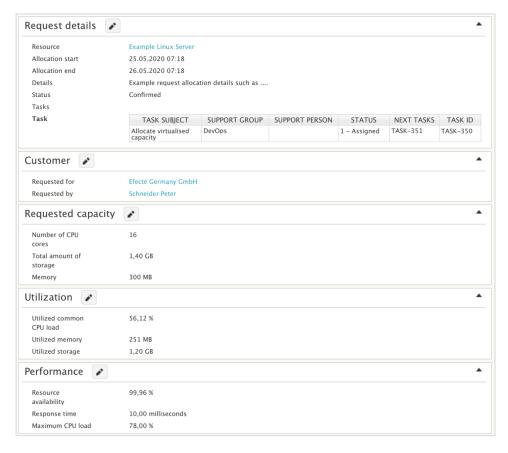


Image: Example Capacity Allocation

Managing of capacity requests and resource allocations for a particular asset such as an entire server can be visualized in calendar views.

4.5.1 Default Template for Capacity Management

The default template for Capacity Management is called "Capacity allocation". It includes information about request allocation, customer, requested capacity, utilization, and other related information.

4.6 Configuration Audits

IT Managers can plan, execute, and record configuration audits for any Configuration Item in the CMDB. Configuration Audits help to improve the quality of the CMDB and identifies shortcomings in the processes and policies surrounding the deployment and removal of assets.



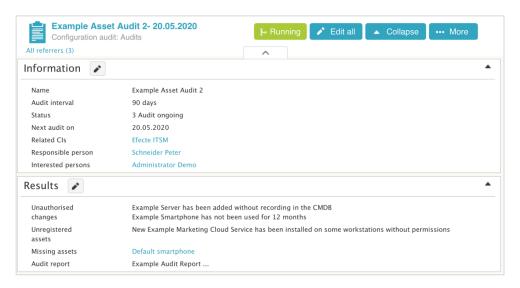


Image: Example Configuration Audit Report Card

The solution automatically creates configuration audit report cards for each interval. The system schedules automatically the next configuration audit based on the selected interval length, creates the necessary manual tasks, and informs the relevant stakeholders. The different findings of every audit can be reported either in dedicated fields or in a summary audit report.

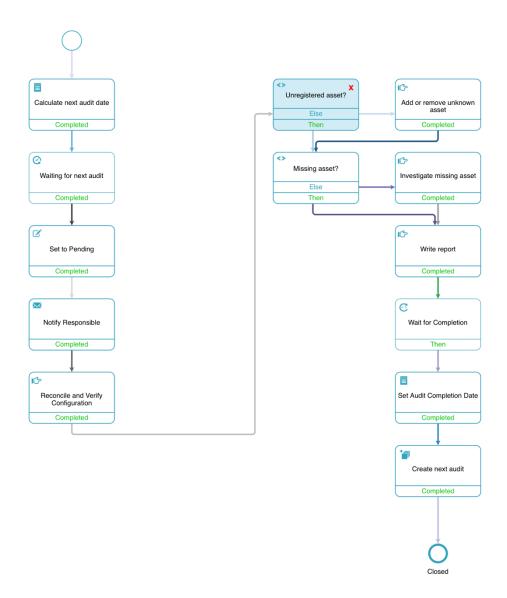
4.6.1 Default Template for Configuration Audits

The default template for Configuration Audits is called "Configuration audit". It includes information about the audit's interval, next audit date, responsible and interested persons, identification information, results, and other related information.

4.6.2 Workflow for Configuration Audits

The following workflow is executed for each configuration audit:





4.6.3 Default Views for Configuration Audits

Name of the View	Purpose	
Configuration audits	A list view of all ongoing configuration audits	
Configuration audit tasks	A list of open tasks related to configuration audits	

4.7 Service Continuity Management

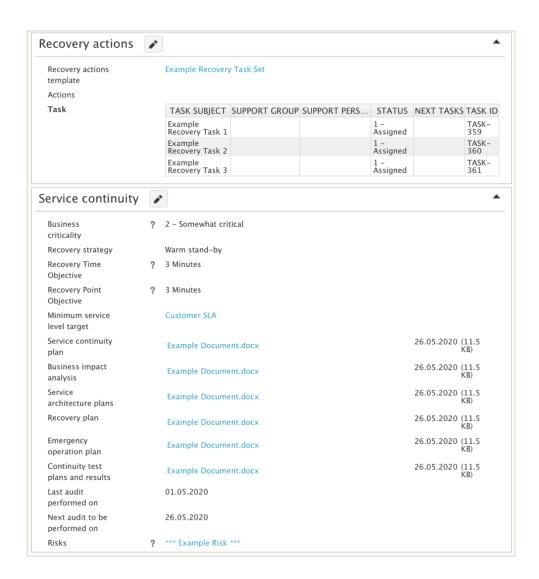
Service Continuity Management is the practice of preparing for outages and disasters affecting the availability of any service. Especially when more services are offered in cloud-based SaaS components the service continuity execution shifts to some extend to the supplier of the service. However, service continuity must be in any case be planned in the organization consuming the service.

Efecte ITSM provides dedicated fields for recording the parameter relevant for service continuity management:

- Recovery Time Objective
- Recovery Point Objective
- Minimum Service Level for Emergency Operations

These fields are part of the Service template in the CMDB.





In addition to these dedicated fields, the Service template includes means to archive Disaster Recovery Plans, Emergency Operation Plans, Architecture Plans, and Business Impact Analysis as attachment for each service.

Recovery actions required for the service restoration can be managed as tasks which are immediately available as guideline on how to restart the service. Audits for the service continuity can be scheduled and automatic email notifications can be sent to the business owner and service manager when the next audit is due.

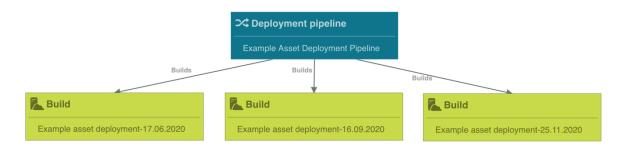


5 TECHNICAL MANAGEMENT PRACTISES

5.1 Deployment Management

Deployment Management is the practice of moving new or changed assets to live environments, mostly referring to production environments. The Deployment Practice is closely linked to the Change Enablement and Release Management Practice, however focusing more on the technical and operational issues of delivering the desired outcome.

Efecte's ITSM solution facilitates the deployment with two entities: the Deployment Pipeline and Builds. The Deployment Pipeline defines the sequence of builds that will be deployed for one asset such as a service, a cloud solution, a server, or a software application. A Build is a single instance of a new deployment at a given time within the Deployment Pipeline.



Actions related to a single deployment such as the schedule, tests, and reviews are collected as part of the Build information.

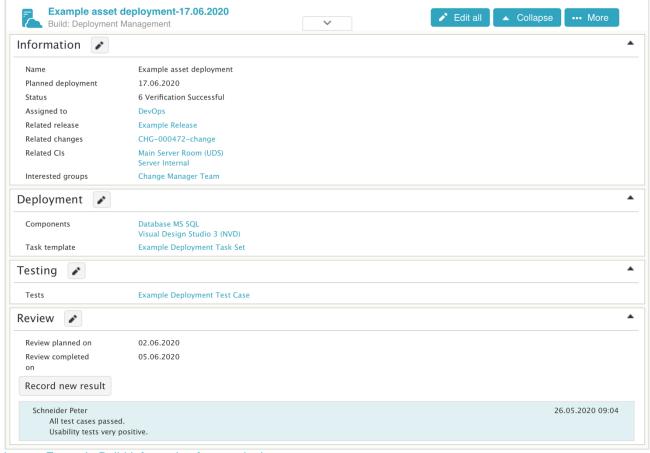


Image: Example Build information for one deployment



The Deployment Pipeline documents the sequence of builds. The Deployment Pipeline also holds all repetitive data for each build such as default deployment tasks and default tests to be performed. This default data is copied to each build in the deployment pipeline.

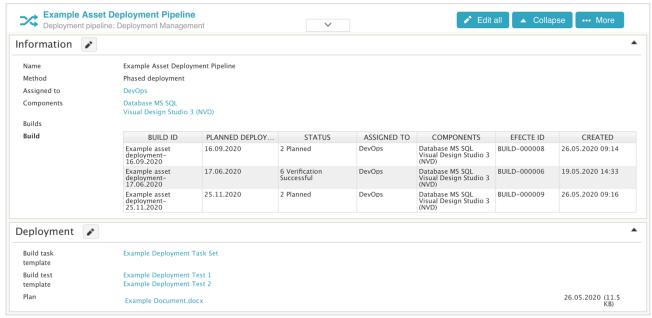


Image: Example Deployment Pipeline information for set of assets

5.1.1 Default Templates for Deployment Management

The default templates for Deployment Management are:

- Build Information related to a specific build (identification information, status, assigned to, references to releases/changes/Cls, components, tasks, tests, review information, etc.)
- Deployment pipeline Information related to the deployment (method, assigned to, components, builds, build tests, plan, etc.)

5.1.2 Default Views for Deployment Management

Name of the View	Purpose
Deployment Pipelines	A list view showing all deployment pipelines
Builds	A list view of all builds recorded
Build Tasks	A list view of all build tasks
Build Task Templates	A list view showing all task templates



6 OUT-OF-THE-BOX ROLES

The default delivery of the Efecte ITSM solution includes two approaches of ready-made views: a set of views organized according to the ITIL process or a set of views according to typical job profiles in IT Service Management.

The following roles according job profiles are pre-configured:

- IT Support Person: typically, an expert providing day to day support
- IT Service Desk Manager: typically, a team manager
- IT Service Manager: typically, a business or capability owner of the IT service management

The following roles are also pre-configured (following mainly ITIL processes):

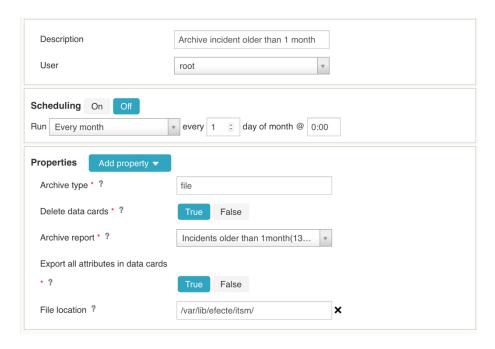
- Change Enablement
- Configuration Management
- Demand Management
- Deployment Management
- Feedback Management
- Incident Management
- Information Security Management
- IT Availability Management
- IT Capacity Management
- IT Finance Management
- IT Knowledge Management
- Monitoring and Events
- Problem Management
- Project Management
- Release Management
- Request Management

7 OUT-OF-THE-BOX ARCHIVING

Archiving of issues such as incidents, service requests, changes and other high-volume processes has several benefits including:

- Improving search performance
- Compliancy to data privacy legislation
- Systematic implementation of a data retention policy





The Efecte ITSM solution has couple archiving actions pre-configured. They can be modified or extended by the administrators. The pre-configured actions for incidents and work time reports move closed and old items to a archiving file. The archiving tasks must be activated by an administrator.

8 OUT-OF-THE-BOX VIEWS FOR DIFFERENT JOB PROFILES

The following sub-chapters describe the views which are pre-configured for users assigned to the different IT job profiles. Note: The views available for each individual process are listed in the chapter of the corresponding process.

8.1.1 Views for IT Support Persons

- 1. IT Support Inbox: A dashboard displaying all open incidents and service requests assigned either to the support group or the support person.
- 2. Critical Incidents: A list view displaying all open incidents with priority "critical"
- 3. Issues Waiting to be Classified: A list view displaying all open issues which have not been classified yet
- 4. My Open Incidents: A list view displaying all open incidents assigned to the support person
- 5. Open Incidents in My Team: A list view displaying all open incidents assigned to the team of the support person
- 6. Open Incidents: A list view displaying all open incidents
- 7. All Incidents: A list view displaying all incidents, also the resolved and closed ones
- 8. My Open Service Requests: A list view displaying all open service requests assigned to the support person
- 9. Open Service Requests in My Team: A list view displaying all open requests assigned to the team of the support person
- 10. Open Service Request: A list view displaying all open requests
- 11. All Service Requests: A list view displaying all requests, also the done and closed ones
- 12. Published Known Solutions: A list view displaying all knowledge base articles in status "Published"
- 13. QuickFill / Canned Responses: A list view displaying all QuickFill-options for frequently recurring issues
- 14. Announcements: A list view displaying a list of open service announcements published on the self-service portal
- 15. Planned Changes this Month: A calendar view displaying changes planned by month

16. My Time Reports: A list view displaying work time reports created by support person

8.1.2 Views for IT Service Desk Manager

- Service Desk Dashboard: A dashboard displaying various operational data such as Incidents waiting for handling or trend for Service Requests per week
- 2. Unassigned Incidents: A list view of all incidents which haven't been assigned yet
- 3. Incident Resolution Velocity: A bar chart displaying how many Incidents have been closed per day
- 4. Unassigned service requests: A list view of all service requests which haven't been assigned yet
- 5. Categories: A list view displaying the categories currently configured for the service desk
- 6. Business hours: A list view displaying the business hours currently configured for the service desk
- 7. Exceptional days: A list view displaying the exceptional days currently configured for the service desk
- 8. Service announcements: A list view displaying a list of open service announcements published on the selfservice portal
- 9. Support groups: A list view displaying a list of support groups currently configured in the service desk
- + numerous statistical views about service desk operation to be included in dashboards or used individually.

8.1.3 Views for IT Service Manager

- 1. Service Manager Dashboard: A dashboard displaying various operational data
- 2. Requests Failing Resolution SLA: A list view covering the service requests which aren't completed in time
- 3. Requests Failing Response SLA: A list view covering the service requests which aren't responded to in time
- 4. Request Waiting for Approval: A list view showing requests that are pending approvals
- 5. All Open Requests: A list view displaying the currently open requests
- 6. All Operational Services: A list view of all services which are in status "active"
- 7. All New Demands: A list view showing all open demands and ideas
- + numerous financial and statistical views about the services.

9 OUT-OF-THE-BOX FOLDERS

All data in any enterprise solution running on top of the Efecte Platform is stored in folders (for more information on the folder functionality, please refer to the dedicated Efecte Platform description document). The Efecte ITSM solution is delivered by default with the following folders:

Module	Folder	Templates
CMDB	Application management	Application
		Mobile application
		Integration
		Application usage
CMDB	Asset	Back Up-Device
		Database
		Device Model
		Mobile Device
		SIM
		Network Device
		Printers
		Servers
		Capacity allocation
		Storage



		Workstation
CMDB	Audits	Display
		Configuration audit
CMDB	Cloud and SaaS components	Cloud infrastructure SaaS component
CMDB	Documents	Document
CMDB	Service availability records	Service availability form
CMDB	Software asset management	Administered software Software license Software license pool Software matching filter Software metering rule Software usage Monitored software installation
CMDB	Tasks	CMDB workflow task
IT Service Management	Category	Category
IT Service Management	Change enablement	Change Standard Change Standard Change Content Change task set Task Event ticket
IT Service Management	Demand management	Demand
IT Service Management	Deployment management	Deployment pipeline Build Task
IT Service Management	Incident management	Incident Major incident Task Quickfill
IT Service Management	IT Budget	IT budget
IT Service Management	Problem management	Problem Task
IT Service Management	Release management	Release Task
IT Service Management	Request fulfillment	Service request Service request bundle Request Management Task Task
IT Service Management	Security Operations	Security requirement Task Security incident
IT Service Management	Test Management	Test Test cases Test suites Test plan Test templates
IT Service Management	Time reports	Work time report
Organization	Approval	Approval
Organization	Audits	Supplier audit
Organization	Companies	Organization
Organization	Cost Centers	Cost center
Organization	Countries	Country
Organization	Feedback	Feedback
Organization	Locations	Location
Organization	Personnel	Person
Organization	Support Groups	Support Group
Organization	Titles	Title



IT Common	Acceptance Criteria	Acceptance criteria
IT Common	Agreements	Agreement
IT Common	Chat Sessions	Chat Session
IT Common	IT Common	Exceptional day (occurs only once) Business hours Self-Service category Exceptional day (occurs every year) Self-Service Item
IT Common	IT Knowledge Base	Knowledge base article
IT Common	Project Task Templates	Project task template
IT Common	Project Tasks	Project subtask
IT Common	Projects	Project
IT Common	Risks	Risk
IT Common	Service Announcements	Service announcement
IT Common	Service Catalogue	Service
IT Common	Service Level	Service level

10 **OUT-OF-THE-BOX PERMISSIONS**

By default, any users registered to the Efecte ITSM solution get a wide range of permissions for each template and folders. If permissions need to be restricted, then this must be done during the deployment phase by administrators or Efecte consultants.

11 **OUT-OF-THE-BOX IMPLEMENTATION OF ANONYMISATION**

The solution is configured to allow anonymization of person records by default. The non-reversible anonymization replaces the value of the First name, Surname, and Email field with the value "Anonymized". All data cards referenced to the person data card will also be updated with the "Anonymized" values.