

TiFiC Support Automation Suite & ITIL

- *TiFiC Support Automation Suite supports and facilitates IT Infrastructure Library (ITIL)*

What is ITIL?

ITIL (Information Technology Infrastructure Library) was created in the early 1990s by the British Office of Government Commerce (OGC) in response to the increasing demand for IT solutions and standardised processes. Today it comprises a set of "Best Practices" that provide recommendations and guidelines for how to implement IT Service Management processes. ITIL is a global standard that establishes a common terminology for processes and functions, thereby facilitating discussions both within and between companies.

Introduction

ITIL is today developing into a global standard for how to set up and structure IT services. Here we will explain how TiFiC Support Automation Suite supports and facilitates ITIL processes. We will focus on the Service Support area and how TiFiC Support Automation Suite supports the five processes **Configuration Management, Incident Management, Problem Management, Change Management** and **Release Management**. Before going into greater detail, however, we must describe TiFiC Automation Suite and its various components.

About TiFiC Support Automation Suite

TiFiC Support Automation Suite is a solution for automated IT support and self-service. The solution is intended for large companies looking to reduce their ongoing client environment support costs. TiFiC Support Automation Suite contains the following tools:

TiFiC Client – This is the tool for the user receiving the support. TiFiC Client helps the users solve the problems themselves. The tool is able to proactively solve many issues by automatically detect the underlying cause and implement a solution, so-called self-healing. From the knowledge database, TiFiC Client will filter out only the information which is relevant to the user, based on the current system configuration and user category. Those issues that cannot be solved through self-service are automatically forwarded to the service desk for manual assistance.

TiFiC Support Analyst Center – This is the support technician's tool. TiFiC Support Analyst Center helps the support technician detect user problems, connects them to the right solutions in the knowledge database and, once this is done, implements these.

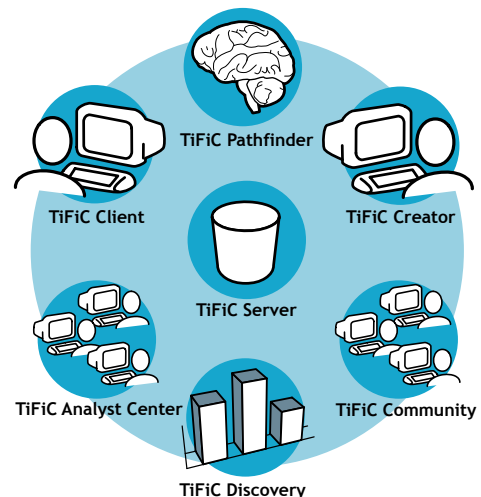
TiFiC Server – This is the knowledge database where the company centrally stores solutions to known problems, along with in-depth statistics about what incidents the users have encountered and how they have used TiFiC Client.

TiFiC Community – This tool is used for formulating draft solutions to known problems. TiFiC Community involves many different user groups, such as product owners, support specialists and support receivers in the process. The finished drafts are forwarded to TiFiC Creator for the final production stage.

TiFiC Creator – This is a tool made for creating and maintaining support solutions. In its visual programming environment, self-healing solutions, meaning solutions capable of automatically detecting and solving the user's problems, can be set up.

TiFiC Pathfinder - This is an intelligent function that helps the support receiver (and the support technician) to quickly solve an issue by automatically suggesting solutions based on statistics collected from previous users with similar system configurations.

TiFiC Discovery – This is the statistics tool from which in-depth system usage statistics for both end-users and support staff can be obtained.



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Integration with complementary Service Desk systems

TiFiC Support Automation Suite is usually integrated with complementary systems in the service desk. Through these integrations, a seamless flow of information can be achieved across the service desk and support providers receive a uniform user interface to work with. Most commonly, integrations are carried out between TiFiC Support Automation Suite and:

- **Incident management systems** – By integrating the TiFiC system with the company's current incident management system, multiple synergies can be achieved. The TiFiC system automatically creates new entries in the incident management system and supplies the user's current system configuration. User history, detailing how the user and/or support staff use the TiFiC system is stored in the incident management system.
- **System Management systems** – Together with a System Management tool (containing, among others, remote assistance and deployment functions), the TiFiC system becomes a powerful support tool.
- **Catalogue systems** (Active Directory, CMDB) – The TiFiC system is capable of using information from a catalogue system for carrying out condition-driven tasks. The TiFiC system can also update the catalogue system to include for instance changes made to the user's computer.

There are today a number of preset integrations between TiFiC Support Automation Suite and complementary Service Desk solutions. In those cases where there are no present integrations available, these can be easily developed through the TiFiC-system's flexible method for collecting and delivering data.

TiFiC Support Automation Suite and ITIL Service Support

TiFiC Support Automation Suite is a platform which is customised for and facilitates many ITIL Service Support processes. The following is a description of which processes the various tools support and how it works.

Incident Management

The aim of Incident Management is to restore normal services as soon as possible once IT-related problems occur. Normal services should also be restored with minimum effect on the business.

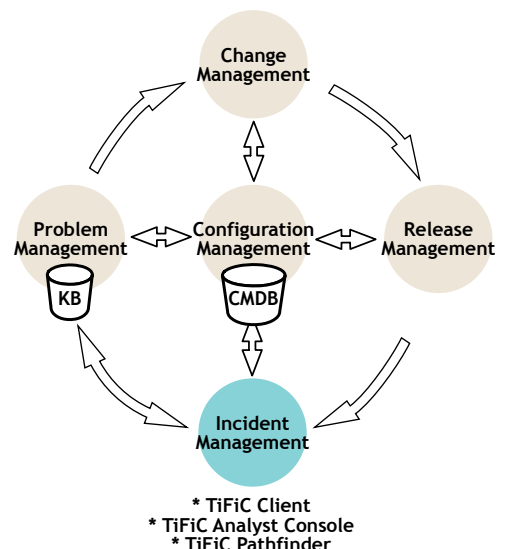
TiFiC Client

TiFiC Client greatly improves the Incident Management process by giving the users the ability to quickly and painlessly solve issues themselves. Many problems can be detected and dealt with automatically (self-healing). In other cases, TiFiC Client actively helps the user find the right solution. TiFiC Client updates a CMDB with all the alterations made. It can also identify if the user's configuration differs from the current norm and, if so, restore it.

In case a user fails to solve the issue by himself/herself, it is forwarded to the service desk for assistance. If so, TiFiC Client creates an entry in the incident management system and supplies the user's current system configuration together with other relevant information from the CMDB.

TiFiC Support Analyst Center

The support provider is able to view all the gathered user information in the TiFiC Support Analyst Center, which makes it easier to find the right solution. The support technician can search the support database for documented solutions, and choose to automatically filter out those solutions that are irrelevant to the user (based on the current system configuration, user category etc.). The solution can easily and with no risk of errors be executed on the user's computer, without the user having to carry out any steps by himself/herself. Through the integration with the incident management system, all actions carried out in TiFiC Support Analyst Center are registered for easy follow-up.



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TiFiC Pathfinder

TiFiC Pathfinder shortens the solving time of incidents by matching the user's situation to the correct solution. The suggested solution is presented to the user in TiFiC Client, and to the support provider in TiFiC Analyst Center. TiFiC Pathfinder analyses all the gathered information, and automatically suggests relevant solutions based on the usage history from previous users.

Problem Management

The aim of Problem Management is to find out the underlying causes of incidents and create solutions for these, which are then stored in a knowledge database. Through Problem Management you can proactively prevent incidents from recurring.

TiFiC Discovery

TiFiC Discovery shows detailed statistics about how users utilise TiFiC Client, and how support staff use TiFiC Support Analyst Center. By analysing the statistics, you can find out what problems users are most likely to encounter and within what areas they occur. In-depth information about user configurations is also stored, which helps in identifying the underlying causes of incidents.

TiFiC Community

Suggestions and drafts for solutions are created in TiFiC Community. TiFiC Community is used by support technicians, product owners and "super users" to document knowledge. The tool also constitutes a discussion forum, where the most effective solutions can be mutually discussed and developed. The draft is then forwarded to TiFiC Creator for the final production phase.

TiFiC Creator

The solutions contained in the knowledge database are created in TiFiC Creator. The type of solution is determined as well as the user categories it is valid for and system configurations it applies to. The tool also contains a visual programming environment where automated support solutions are constructed and tested. These solutions can then be proactively implemented in the end-user environments to prevent incidents from occurring.

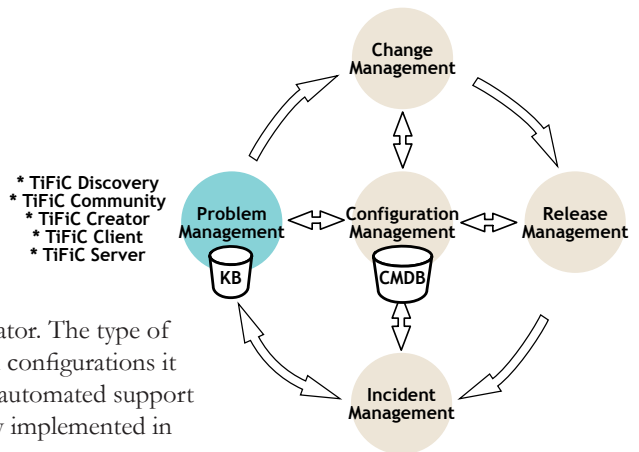
Solutions constructed in TiFiC Creator are used by both end-users and support staff. Each solution can contain elements visible to only one of the parts. Moreover, different language versions can be "layered" within each solution. This fundamental structure means that the knowledge database only contains one instance of each solution, thereby greatly facilitating maintenance of the database as the amount of information grows.

TiFiC Client

TiFiC Client automatically implements the proactive solutions created in TiFiC Creator, greatly reducing the amount of incidents. All solutions are condition-driven, meaning that they only run on computers and user environments where all conditions are fulfilled. This minimises the risk of causing errors by implementing the wrong solution.

TiFiC Server

TiFiC Server contains the knowledge database holding the solutions created in TiFiC Creator, along with in-depth statistics on how users and support providers use the database.



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Configuration Management

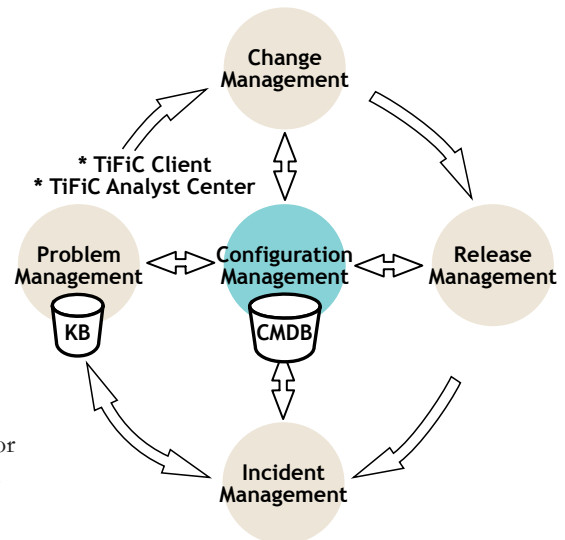
The aim of Configuration Management is to create and maintain a database, CMDB (Configuration Management Database), with CI (Configuration Item) objects that are relevant to IT infrastructure. This configuration database supports all other processes within Service Management.

TiFiC Client

TiFiC Client can automatically collect and update the CMDB with predefined CIs read from the users' computers. TiFiC Client can identify deviations among the user's CIs and compare them to preset standard CI that are valid for a certain user category, and then automatically either restore the right CIs or forward a notice to the service desk. TiFiC Client enters the relevant CIs into the CMDB. These will then, together with current CIs read from the user's computer, form the basis of the selection process in which only the information relevant to the user is filtered out.

TiFiC Support Analyst Center

Just like TiFiC Client, TiFiC Support Analyst Center also collects information from the CMDB and the current CIs from the computer, but here it is done for the end-user assisted by the support provider. Changes made to the CIs by the support provider for the end-user are automatically updated in the CMDB.



Change Management

The aim of Change Management is to create a structured way of receiving requests for change – so-called RFCs (Request for Change) – as well as make decisions regarding solutions and implement them. With this method, one may effectively evaluate the risks involved in changing the IT-environment as well as reduce the amount of incidents.

TiFiC Client

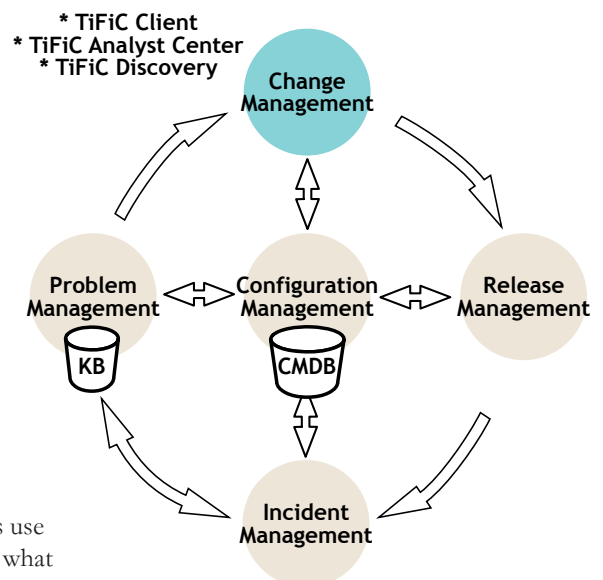
TiFiC Client provides users with an interface where they in a structured way can request changes. These requests are forwarded to a Change Advisory Board, which then decides whether a particular change should be implemented. As information about the user's system configuration is attached to the RFC, it becomes easier to determine whether the suggestion is relevant and what effects it would have on other services.

TiFiC Support Analyst Center

TiFiC Support Analyst Center gives the support providers an interface where they in a structured way can suggest changes, or make RFCs. These requests are forwarded to a Change Advisory Board, which in turn decides whether a change should be implemented or not.

TiFiC Discovery

By analysing statistics in TiFiC Discovery on how users and support providers use the knowledge database, it is possible to gain firm ground for decisions about what RFCs should be implemented and how they would affect other services. One can also accurately prioritise RFCs within those areas where statistics show users encounter many incidents.



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Release Management

The aim of Release Management is to plan and implement changes (roll out) in the IT infrastructure. Setting up installation routines and managing software updates are important parts of Release Management.

TiFiC Creator

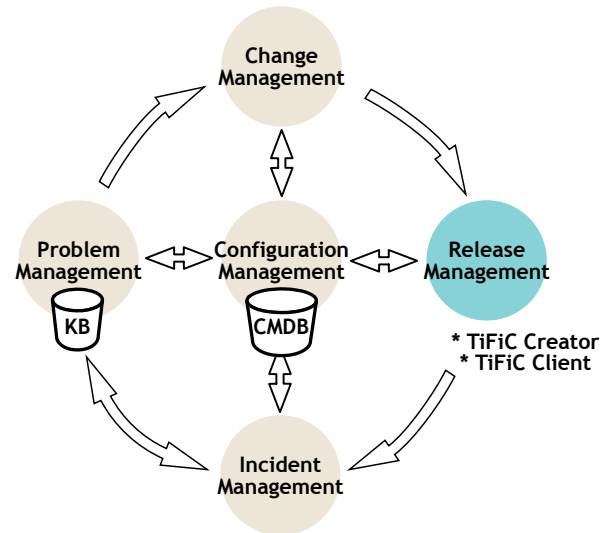
In TiFiC Creator it is possible to create automated solutions, which in a structured way implement changes in the users' IT environments. The system change process, which can also utilise process elements from other systems (such as installation tools, or similar), is set up in TiFiC Creator. By creating the workflow in TiFiC Creator, it becomes easy to evaluate the extent of the change and manage any occurring errors.

TiFiC Client

System change processes created in TiFiC Creator are implemented by TiFiC Client. TiFiC Client reports on the extent of the change and automatically notifies the service desk if something goes wrong. Once the change is complete, TiFiC Client updates the CMDB with the CIs that have been modified.

TiFiC Migration Suite

TiFiC can also provide a packaged solution for IT migration projects – TiFiC Migration Suite. TiFiC Migration Suite automates migration processes, which facilitates Release Management work.



Summary

Companies aiming at offering efficient IT services at a low cost, have lots to gain by developing and implementing standardised processes. In this area, ITIL is quickly becoming a global standard with its guidelines and recommendations. We have shown how TiFiC Support Automation Suite fits into ITIL Service Support, and the advantages companies gain by implementing this solution. We have also shown how all process elements within ITIL Service Support can use TiFiC Automation Suite to automate and link processes, and reduce the burden on both support receivers and support providers.

About TiFiC

TiFiC is a Swedish software company that develops and markets solutions for support automation and self service. TiFiC's solutions use the latest research in usability and artificial intelligence to automatically identify and solve computer support issues in a user-friendly way.

In 1999 the TiFiC innovation was introduced and the company founded by researchers from Chalmers University of Technology in Göteborg, Sweden.

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