

Knowledge transfer - The key to successful delivery of support

Providing support for the Register of Vehicles and Vehicle Documents (MRVL), Register of Certifications, and the new Register of Drivers is crucial to the user. Despite detailed instructions, many users are finding themselves in situations they cannot handle on their own. You know the old saying: "The Devil never works alone..." In such situations, fast and efficient support is more than welcome.

In our everyday work, support operators are met with all sorts of problems and challenges. The knowledgebase is a very valuable tool, stored in the MARVAL support provision system, and we are also developing our own application for applying quick fixes to the database (QuFi). This article presents how support is organized, how the knowledgebase is created and what features QuFi offers.

1st level of support

The first level of support is the service desk, which is also the central starting point for all customer relations. At this level support operators take the user's calls and try to resolve any problems they might have. If the problem cannot be resolved, the call is elevated to the second or third level of support. For each call or e-mail received, a support ticket is created in the MARVAL support tool. If the first level of support successfully resolves the user's problem, the support ticket is marked as resolved. If the support ticket is not resolved, it is elevated to a higher level. This level employs people with good communication skills and basic knowledge required to resolve simple questions.

2nd level of support

The second level involves specialized support for specific products. The operator's knowledge is based on in-depth familiarity with the product. The tasks of second level employees are: resolving support tickets arriving from the first level; providing solutions and preparing the knowledge for the first level; answering

frequently asked questions, and making quick fixes. The second level of support collects information about recurring cases and notifies the third level of support. Second level of support operators resolve issues elevated from the first level, but also perform other tasks: testing new versions of software, writing the knowledgebase. If the support ticket shows that a developer's intervention is needed to resolve the issue, the support ticket is elevated to the third level. The support ticket is transferred from MARVAL to the JIRA system.

3rd level of support

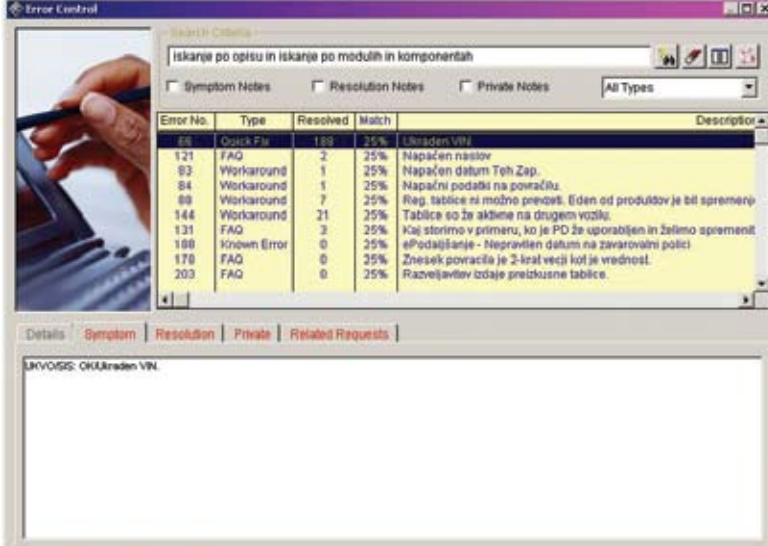
Together with outsourced providers, the third is the highest level of support. This category includes: database administrators, software

developers and technical support. The role of the third level of support is to resolve more complex support tickets, resolve issues, transfer knowledge from the development level to lower levels of support, developing and testing new versions which include improvements and remove errors found in the system. Representatives of the third level are involved in the planning and development of new product functionalities. Based on the collected information, the third level is the level which also develops quick fixes for QuFi.

Knowledgebase

The knowledgebase, known as Control Error in the MARVAL environment, is used to collect knowledge from all three levels of support.

Picture 1. Error control



The screenshot shows a software window titled "Error Control" with a search bar and several tabs: "Symptom Notes", "Resolution Notes", and "Private Notes". A table displays error records with columns for Error No., Type, Resolved, Match, and Description. Below the table are tabs for "Details", "Symptom", "Resolution", "Private", and "Related Requests".

Error No.	Type	Resolved	Match	Description
121	FAQ	2	25%	Napačen naslov
93	Workaround	1	25%	Napačen datum Teh.Zap.
84	Workaround	1	25%	Napačni podatki na posračju.
89	Workaround	7	25%	Reg. tablice ni možno prevoziti. Eden od produktov je bil spremenjen.
144	Workaround	21	25%	Tablice so že aktivne na drugem vozilu.
131	FAQ	3	25%	Kaj storimo v primeru, ko je PD že uporabljen in želimo spremeniti
188	Known Error	0	25%	ePodajanje - Nepravilen datum na zavarovalni polici
178	FAQ	0	25%	Znesek povračila je 2-krat večji kot je vrednost.
203	FAQ	0	25%	Razveljavitev izdaje preizkusne tablice.

The purpose of the database is to be able to find information quickly, when we need it to resolve support tickets. We can search the knowledgebase by error description and support ticket classification, as well as by module and component of the product in which the problem was encountered. The knowledgebase can be populated either automatically from the support ticket itself, or manually. A well-organized knowledgebase allows support staff to resolve problems even in the absence of employees who have the special skills necessary to resolve the particular problem at hand. This way our support is not dependent on individual experts but rather provides an excellent resource for fast and efficient transfer of knowledge from higher levels to lower levels. Due to the significance of the database for the entire customer support system, all levels of support are regularly updated about any new features.

QuFi

QuFi is a nickname for the program for making quick fixes in the database. The name is a compound of the phrase "Quick Fix". We decided to implement this application because we realized that due to a number of errors brought from the old system, it was much faster and cheaper to develop a quick fix application than embed these functionalities into the actual MRVL system. The application was developed for internal use and was initially only used to

correct VIN (chassis) numbers on vehicles with false hits in the Schengen Information System (SIS). The application allowed us to quickly and efficiently (i.e. with just a few clicks) carry out procedures like vehicle registration, renewing the certificate of registration, changing ownership etc. Because this saved us a lot of time and take the burden off the third level of support, we decided to upgrade the application so that we could fix 6 of the most common errors on the database. QuFi will thus enable fixing false hits of stolen VIN numbers and prepare a weekly overview of the fixed VIN numbers, which allows us to print out vehicles with ongoing procedures before restoring the initial status (hit in the SIS).

Because the weekly VIN check is a very complex operation, which can be seen as a slowing down of the MRVL system when the procedure is in operation, we only run this function at off-peak hours. This is usually on Friday afternoons. QuFi has also proven to be an effective tool for managing support tickets, allowing "merging". Other features include: cancelling license plate reservations, separating the vehicle and type approval, editing technical minutes, IE membership. We are also working on a quick fix module which will focus on correcting errors in the new Register of Drivers.

JIRA

JIRA is a system which allows recording unresolved second level support tickets,

known software issues and new functionality requests. JIRA allows delegation of tasks and a variety of views, including a list of errors already corrected.

JIRA collects everyday issues we encounter and resolve each day, leaving a track of these fixes and providing our colleagues and successors with the necessary knowledge. If even the slightest lack of communication between those working on the same project can pose a problem, you can imagine what this means for ongoing projects where people come and go with time.

In our productivity and maintenance projects MARVAL and JIRA help us track all support tickets, calls and user e-mails. This way we make sure that no support ticket is lost or remains unresolved. The register administrator at the Ministry of the Interior (MNZ) can request a report on why any procedure was done and review the data on vehicles and vehicle owners at any time.

The described method of providing support has proven to be very effective and so these applications will continue to receive a lot of our attention in the future. We want to maintain the high level of customer satisfaction with our services.

Cene Lap

Picture 2. QuFi

