Project Mimir – project end report

Project conclusion

Project Mimir has reached its set goals. *QDoc can now generate the Qt documentation in Dita XML format.* The remaining work is of such a nature that it should be part of the regular maintenance work on the documentation tool chain. The only exception is including the metadata structure that provided by Nokia IT during the spring of 2011.

Project

Overall targets

- Our target was to provide developers using Qt and the Qt SDK with a consistent user experience when using the documentation. A developer should in general find all relevant documentation in one place, and not have to browse through numerous web sites to locate Qt related documentation, created by/for Nokia.
- We also wanted to make it easier to share and use documentation written by different documentation teams inside/outside of the organization. Nokias teams should have a common documentation format and repository to accomplish this.

These two goals approach different, but interconnected, problems. We want to give our customers a *consistent user experience*, providing them with as much *relevant* documentation as possible; and of as *high quality* as possible. To accomplish this we need to share the expertise held by the different teams in Nokia.

One way to do this is to port the documentation written by Nokias documentation teams into a common standardized format. The next step would be to share these resources in a repository where all teams have access. When this system is in place, all documentation teams in Nokia will be able to use this base of information when producing their final documentation products.

We create three groups to work with this project. Firstly, we create a steering committee to decide the roadmap and action points. This committee should have representatives from the management of Nokia internal stakeholders. Secondly, we create a working group with Qt/ASF resources dedicated for the project to implement the solutions. Thirdly, we create a reference group with relevant expertise, including reps from documentation teams outside Nokia.

Suggested targets:

- We move to a documentation format common to all the teams involved. The documentation teams port their documentation into a common intermediate format.
- We share the documentation source amongst the teams. The intermediate format is shared in a common repository.

- We use metadata and a content management system to organize the documentation source.
 The teams create a system of metadata to accompany the documentation source.
- We use a tool that can extract the documentation source and generate a set of different final documentation formats, based on templates. This should include publishing to different web sites, Qt help files, PDFs and eclipse/carbide plug-ins.
- We define a documentation model for QtWebKit documentation for web developers.

Organization:

Project Manager: Morten Engvoldsen

Developer: Martin Smith

External developers: Eleanor Weavers and Jonathan Harrington

- Support from Nokia IT: Indi Liepa

Stakeholders

There have been stakeholders directly and indirectly involved with the project. These both internal and external teams have been involved in different ways in providing documentation relevant for Qt, and for the Qt SDK.

Documentation Interchange meetings

Qt DF, Forum Nokia, Symbian, Maemo/MeeGo and Ovi has been running projects to port their documentation to the Dita XML format. Nokia IT has also been involved to provide support. The initial suggestion from Qt was to commit the teams to project Mimir, but it made more sense for the different entities to run their own projects, and communicate their progress in a joint meeting. The biweekly Documentation Interchange-meeting was mainly hosted by Nick Hill. This provided a good chance to synchronize on the progress, and bring up issues that the teams needed to align.

Issues discussed during the meetings was porting to the Dita format, applying metadata and deciding on a license model.

Internal stakeholders

Qt DF marketing and Qt Webkit have been involved in different parts of the project. Qt Webkit has been working on getting the Qt Webkit documentation in QDoc format. This would enable them to generate their documentation in Dita XML and HTML as well as Qt Help format for the SDK. Qt DF marketing are using the Qt documentation in Dita XML format as source for their representation of Qt Documentation on the Developer Network site.

Formats

The direct consequents of project Mimir, is that QDoc now generates documentation written in QDoc markup into Dita XML format. The Dita format used mainly follow the CXX specialization, but falls back on the generic Dita standard whenever the specialization falls short. One of the future needs in regards to specializations is to develop a specialization for QML code; C++ Namespaces and C++ include files.

Meta data

Finding a common standard for metadata is important to ensure that documentation from different sources can be pushed into the same tool chain. Qt initially delivered a suggestion to the documentation interchange meeting, and the other teams followed up with comments. Nokia IT has since developed a standard, based on the feedback on the original Qt model, and existing structures used in Nokia.

Tool chain

QDoc is now able to output Dita XML and the last few features in order to get full control over the output in terms of syntax and semantics are soon completed. Martin Smith in the Qt documentation team is performing this work.

What remains is to implement the metadata that should live inside the documentation Dita XML output. This structure is still not complete.

QDoc can now:

- Generate Dita XML using the CXX specialization.

QDoc cannot yet:

- Read Dita XML. Whether it should be able to read Dita XML depends if it is needed in the future, or if a different tool will be used for publishing.
- Generate metadata and include this in the Dita XML output.

Documentation repository

Creating a CMS solution in order to share the documentations with others and to feed the raw material into a publishing tool has been included in other projects. As an intermediate solution, sets of the Qt documentation was published in Dita XML format on a server, and shared amongst the stakeholders for testing.

Project timeline

The project was scheduled to have a finished Dita XML generator during August. This generator was not stable until October. Difficulties aligning the QDoc output, and the required validated Dita XML were the main reason for the delay. In addition, regular Qt documentation tasks needed to take precedence during the last weeks before release.