

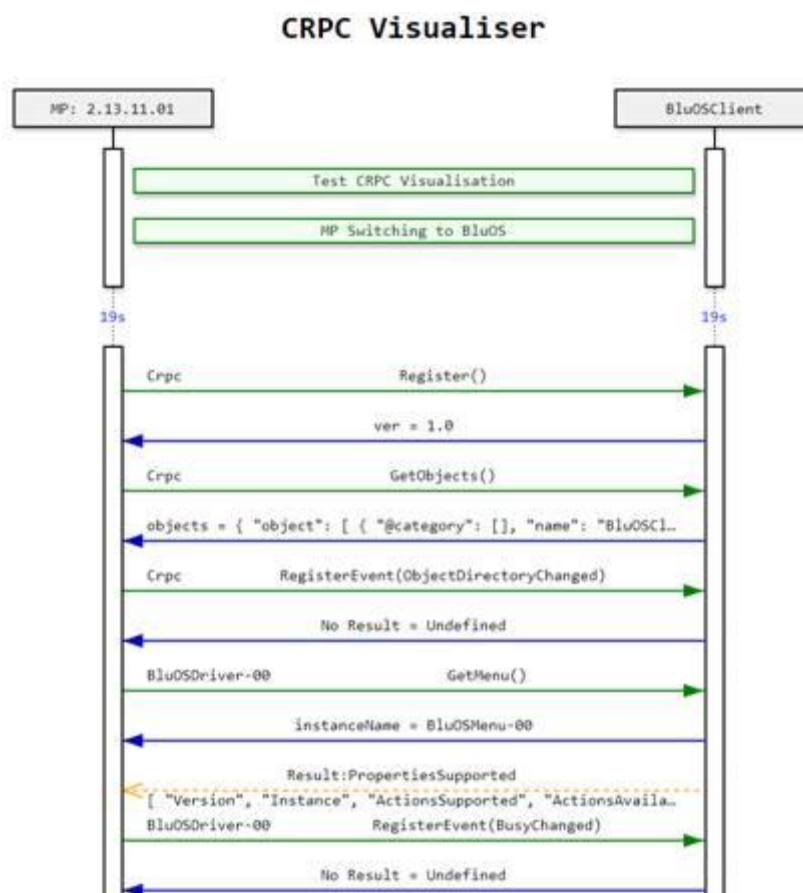
CRPC VISUALISER

INTRODUCTION

This document details how to get started with Ultamation's CRPC Visualiser – a utility class and SIMPL+ wrapper to aid in the debugging of CRPC messaging when developing Media Player-compatible modules for Crestron control systems.

The Media Player Smart Object is one of the best things to come out of Crestron's user interface platform over the past few years, yet manufacturer support has been very poor. Whether you're building systems in the native tools (as we do) or with Studio, the Media Player simplifies deployment of audio sources, and presents a common user interface layout to users, regardless of which source they're using.

CRPC Visualiser was put together to assist in the development of Media Player compatible source drivers, but giving a visual representation of the Crestron RPC calls between the processor and the driver under development. The communication is presented in a UML-esque interaction diagram, and is generated dynamically from XML using an XSLT styling template (provided in the distribution).



GETTING STARTED

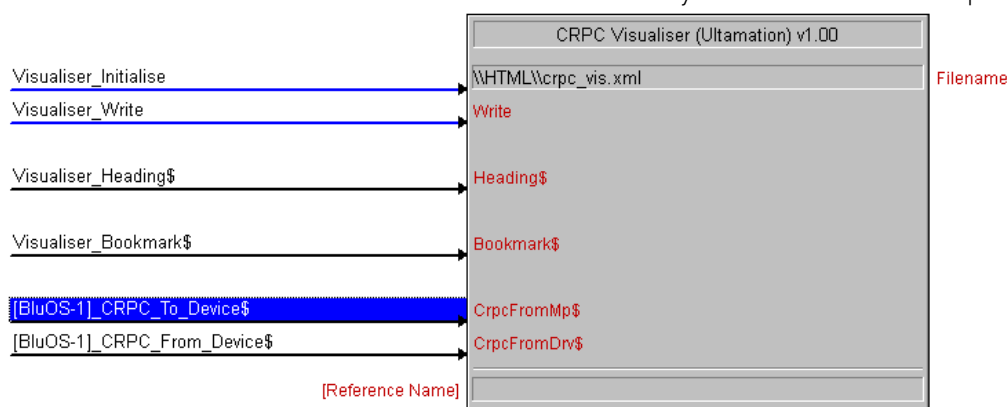
You can either download the pre-compiled modules for use within SIMPL Windows or – even better – take a copy from Github and contribute fixes/enhancements to the project.

<https://github.com/OlHall/CrpcVisualiser>

HOW TO SET-UP

Once you have a compiled version of the project (compilation is very simple as there are very few dependencies and only two source files) you need to do the following:

1. Include the "CRPC Visualiser (Ultamation) v1.00" in your SIMPL windows program.



2. Enter the filename where your visualiser data will be written – this will normally be the processor's HTML folder providing easy access to the visualisation from a web browser.
3. The Initialise signal will create a new visualiser file and write the "heading" information as an initial bookmark.
4. The visualisation data is written each time "Write" is pulsed – this would normally be once every few minutes.
5. The Bookmark\$ signal provides a mechanism to insert "bookmarks" into the data to mark important points in the conversation. These show as green boxes in the visualisation.
6. Finally, connect up your CRPC From and To signals to the CrpcFromM(edia)P(layer)\$ and CrpcFromDr(i)v(er)\$ signals. Each time the Media Player communicates, then information will be captured and written to the XML file on the next "Write".
7. Finally, copy the XSLT file "crpc.xsl" (included in the distributions) to the same directory as the XML file so that your web browser can properly style the XML data.
8. Run the program and periodically refresh your browser, point to http://<processor_ip>/crpc_vis.xml - the browser will do the rest.