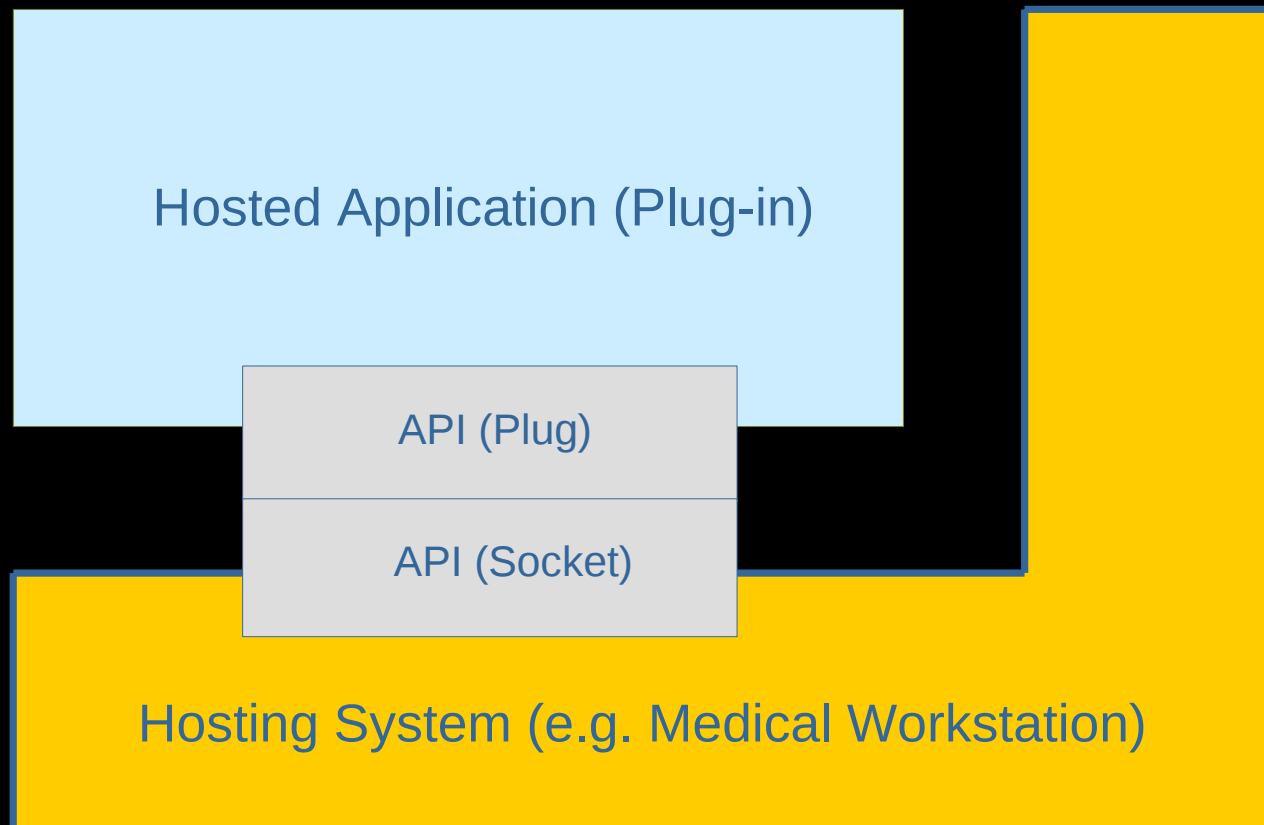


# Dicom Application Hosting in CTK

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# What is Dicom Application Hosting?

Standardized plug-in interface for DICOM based medical computing systems



# What is Dicom Application Hosting?

- Based on WSDL with SOAP bindings
- Different data exchange mechanisms
- Bidirectional communication
- Both host and app are “server” and “client”
- The host calls a “hosted application” by executing it as an external program:

*app -hostURL url1 -applicationURL url2*

# Web Service Toolkits

- gSOAP - popular C++ toolkit, but with licensing issues:

“Note that the wsdl2h tool, UDDI code, Web server, and sample applications are NOT covered by the gSOAP public license. These are offered under a choice of GPL or commercial licensing.”

- Apache Axis2/C
  - C-based toolkit
  - No docs about embedding a server



# Web Service Toolkits

- WSO2 Web Services Framework for CPP (based on Axis2/C)
- Staff (based on Axis2/C)
- easySOAP (LGPL)
- QtSOAP (a Qt solutions component)
  - No server side SOAP

# Web Service Toolkits

Use a framework like Axis2/C

Pros:

- Automatic code generation from WSDL
- Automatic binding to C/C++ methods
- Server component available

Cons:

- New moderate to large sized toolkit
- No Qt datatypes → write wrappers
- Possibly higher learning curve

# Web Service Toolkits

## Using QtSOAP

### Pros:

- Native Qt classes and datatypes
- Small and easy to get started

### Cons:

- No server component

# CTK Dicom WG23 Plugins

Experimental plugins at

<http://github.com/saschazelzer/CTK/tree/dah>