Virtual CICS user group: Newsletter 45

Welcome to the Virtual CICS user group newsletter. The Virtual CICS user group at www.fundi.com/virtualcics is an independently-operated vendor-neutral site run by and for the CICS user community.
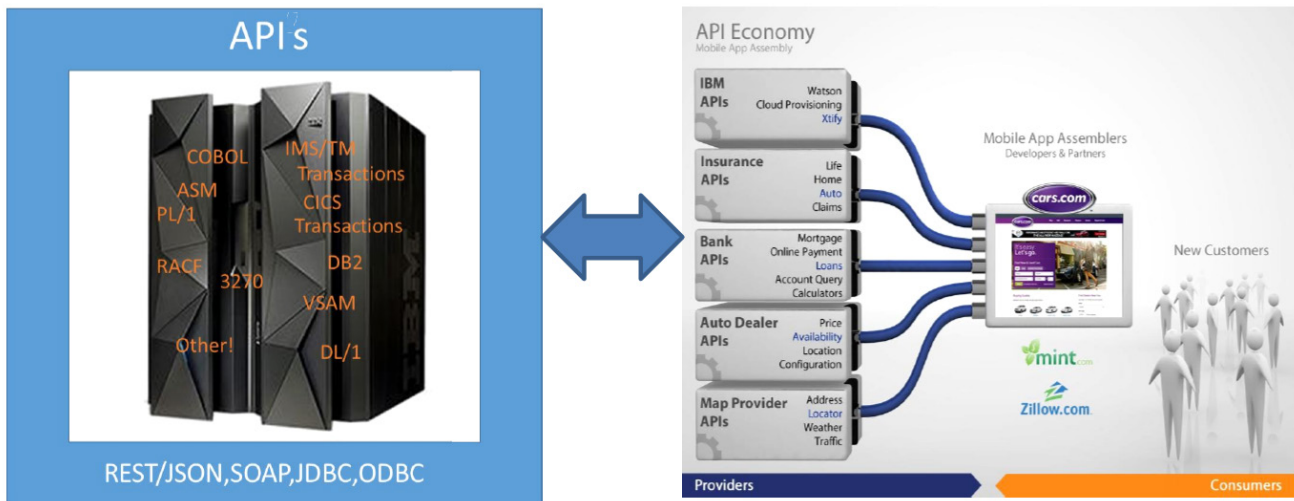

Figure 1: The 'connected' mainframe

Virtual CICS user group presentation

The latest webinar from the Virtual CICS user group was entitled, "From Legacy to Leading Edge – Creating CICS APIs Easily Without Coding", and was presented by Glenn Schneck, Principal Technical Architect at GT Software.

Glenn has 43 years of IT experience and has 34 years of CICS Systems Programming experience in insurance, entertainment/ theme parks, and banking. Glenn has been a speaker at numerous conferences and is currently the Project Manager of the CICS Project at SHARE. Glenn is currently a Principal Technical Architect at GT Software.
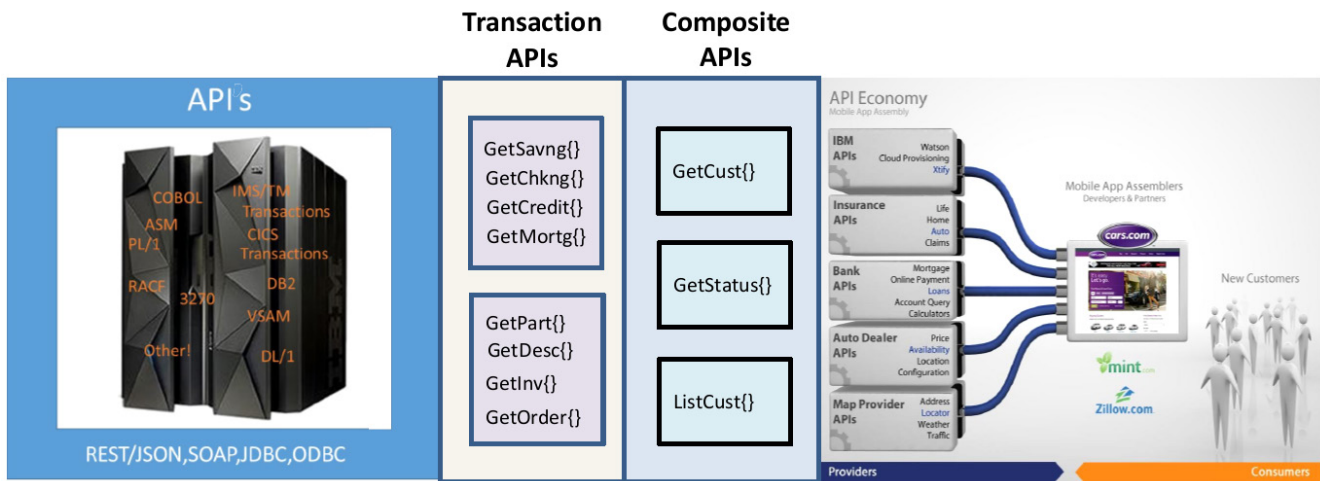
Glenn Schneck started

Figure 2: Composite APIs

the session by explaining what was meant by an API (Application Programming Interface). According to Wikipedia: an Application Programming Interface (API) is a set of subroutine definitions, protocols, and tools for building application software. It is a set of clearly defined methods of communication between various software components.

Glenn illustrated this by looking at a car hire company that needs information about potential customers from banks, insurance companies, auto traders, map providers, etc, and it can get this information through APIs. Figure 1 shows how this information can be obtained from familiar mainframe applications using SOAP, REST/JSON, JDBC or ODBC.

There are many ways that

information can get off the mainframe, for example: z/OS Connect Enterprise Edition; CICS Transaction Gateway (CTG); CICS Web Services (CWS), IMS CONNECT, HostBridge; TN3270; and SQL to Data.

These mainframe connectors can talk to business services at two levels. It could be using single transaction APIs (which can be dangerous coding at such a low level), or using composite APIs. This is illustrated in Figure 2.

Figure 3 looks at what needs to be done and compares it to what can be found in reality when people try to do this – classify bad examples (the bad) and very bad examples (the ugly).

Glenn Schneck then went on to show how the difficulties could be solved using GT Ivory API Orchestration. He also spent some time

demonstrating how the software could be used. And finally, Glenn gave some examples of satisfied customers who had used the product.

A copy of Glenn Schneck's presentation is available for download from the Virtual CICS user group Web site at www.fundi.com/ virtualcics/presentations/ CICSAPIsJul18.pdf.

You can see and hear the whole user group meeting by downloading the WMV file from www.fundi. com/virtualcics/ presentations/2018-07- 10meeting.wmv.

Meeting dates

The following meeting dates have been arranged for the Virtual CICS user group:

- Keith Banham, Manager, Research

REALITY / NEED	THE BAD	THE UGLY
All data structures supported	Some structures don't map well	Comp-3, binary , OCCURS DEPENDING ON, REDEFINES
Copybook fields exposed as service inputs/outputs	Names in COBOL may be cryptic and need to be renamed	Blank When Zero, Program control fields with no external value
Expose existing programs without changes	BMS map macros that set input message field values	

REALITY / NEED	THE BAD	THE UGLY
Existing transactions exposed as REST or SOAP	A transaction may be too fine grained	Multiple transaction dependencies
Programs that return multiple output formats designed for terminals	Data may be too convoluted to use in a service	Volume of data may be too large to return to a distributed client
PFKEY = TRANCODE	Maybe need multiple transactions in sequence	

REALITY / NEED	THE BAD	THE UGLY
Combine transactions in one service	May not work well with others	API's that run for minutes
Conversational transactions	Long running conversations may be long running API's	No understanding of conversational impact, rollback

Figure 3: Mainframe API challenges

and Development at Macro 4, a division of UNICOM Global., will be presenting, "Multi-factor authentication for z/OS and CICS: what, why and how – part of your GDPR compliance strategy".

• The following meeting is on 13 November 2018, when Jason Brosius, Senior Software Engineer at CA Technologies, will be presenting.

We will be using Citrix GoToMeeting for the user group meetings.

Recent CICS articles

Enhanced support for Policy System rules – now available in CICS TS 5.4 with APAR PI92806 and CICS Explorer 5.4.0.11 by Andrew Wharmby on CICS DevCenter (23 July 2018). You can find the article at: https://developer. ibm.com/cics/2018/07/23/ enhanced-support-policy-system-rules-now-available-cics-ts-5-4-apar-pi92806-cics-explorer-5-4-0-11/

OSGi Demystified: 2.4 – Boot Compatibility by Ivan Hargreaves on CICS DevCenter (12 July 2018). You can find the article at: https://developer.ibm. com/cics/2018/07/12/

osgi-demystified-2-4-boot-compatibility/

OSGI Demystified: 2.3 – OSGi resolution by Ivan Hargreaves on CICS DevCenter (12 July 2018). You can find the article at: https://developer.ibm. com/cics/2018/07/12/ osgi-demystified-2-3-osgi-resolution/

OSGI Demystified: 2.2 – The mystery explained with boot delegation by Ivan Hargreaves on CICS DevCenter (12 July 2018). You can find the article at: https://developer.ibm. com/cics/2018/07/12/ osgi-demystified-2-2-the-mystery-explained-with-boot-delegation/

OSGi Demystified: 2.1 – OSG-sigh by Ivan Hargreaves on CICS DevCenter (12 July 2018). You can find the article at: https://developer.ibm. com/cics/2018/07/12/osgi-demystified-2-1-osg-sigh/

Enterprise Architects: an introduction to Node.js in CICS by Mark Cocker on CICS DevCenter (3 July 2018). You can find the article at: https://developer. ibm.com/cics/2018/07/03/ enterprise-architects-introduction-node-js-cics/

Node.js Developers: an introduction to Node.js in CICS by Mark Cocker on CICS DevCenter (3 July 2018). You can find the article at: https://developer. ibm.com/cics/2018/07/03/ node-js-developers-introduction-node-js-cics/

System Programmers: An introduction to Node.js in CICS by Mark Cocker on CICS DevCenter (3 July 2018). You can find the article at: https://developer. ibm.com/cics/2018/07/03/ system-programmers-introduction-node-js-cics/

CICSplex name detector by Jon Collett on CICS DevCenter (27 June 2018). You can find the article at: https://developer.ibm.com/ cics/2018/06/27/cicsplex-name-detector/

Configuring Kerberos for CICS with RACF and Microsoft Active Directory by John Taylor on CICS DevCenter (25 June 2018). You can find the article at: https://developer.ibm.com/ cics/2018/06/25/configuring-kerberos-cics-racf-microsoft-active-directory/

OSGi Demystified: 1.5 – JRE class visibility, bootdelegation & system.packages.extra by Ivan Hargreaves on CICS

DevCenter (14 June 2018). You can find the article at: https://developer.ibm.com/cics/2018/06/14/osgi-demystified-1-5-jre-class-visibility-bootdelegation-system-packages-extra/

OSGi Demystified: 1.4 – OSGi Services by Ivan Hargreaves on CICS DevCenter (14 June 2018). You can find the article at: https://developer.ibm.com/cics/2018/06/14/osgi-demystified-1-4-osgi-services/

OSGi Demystified: 1.3 – Bundles continued by Ivan Hargreaves on CICS DevCenter (14 June 2018). You can find the article at: https://developer.ibm.

com/cics/2018/06/14/osgi-demystified-1-3-bundles-continued/

OSGi Demystified: 1.2 – Bundles in Liberty by Ivan Hargreaves on CICS DevCenter (14 June 2018). You can find the article at: https://developer.ibm.com/cics/2018/06/14/osgi-demystified-1-2-bundles-liberty/

OSGi Demystified: 1.1 – Bundles of Fun by Ivan Hargreaves on CICS DevCenter (14 June 2018). You can find the article at: https://developer.ibm.com/cics/2018/06/14/osgi-demystified-part-1-bundles-fun/

Sponsorship opportunity

Are you missing a great opportunity to advertise your CICS software?

The Virtual CICS user group is now offering software vendors the opportunity to advertise their products in a number of ways. You could have an advert on the home page of the Web site (at www.fundi.com/virtualcics), you could advertise in the newsletter, and/or you could advertise in the monthly e-mails sent to members of the user group.

E-mail trevor@itech-ed.com for full information about marketing opportunities with the Virtual CICS user group.

About the Virtual CICS user group

The Virtual CICS user group was established as a way for individuals using IBM's CICS TS systems to exchange information, learn new techniques, and advance their skills with the product.

The Web site at www.fundi.com/virtualcics provides a central point for coordinating periodic meetings (which contain technically-oriented topics presented in a webinar format), and provides articles, discussions, links, and other resources of interest to IBM CICS practitioners. Anyone with an interest in CICS is welcome to join the Virtual CICS user group and share in the knowledge exchange.

To share ideas, and for further information, contact trevor@itech-ed.com.

The Virtual CICS user group is free to its members.