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

**Virtual CICS user group presentation**

The latest webinar from the Virtual CICS user group was entitled, “Using Analytics and AI to Find and Fix Inefficient Patterns in CICS Integration”. It was presented in September by Russ Teubner, who was CEO at HostBridge Technology, and is now a Distinguished Engineer in the Mainframe Software Division at Broadcom, and Greg Smith, Software Engineer.

Russell Teubner is a Distinguished Engineer at Broadcom focusing on mainframe application modernization. A seasoned inventor and entrepreneur, over the last 40 years Russ has applied his creative energies to solving difficult

---

**Figure 1: Inefficient integrations are a significant barrier to modernization**

---

**Contents:**

- Virtual CICS user group presentation 1
- Meeting dates 3
- CICS articles and blogs 4
- About the Virtual CICS user group 4
problems associated with integrating IBM mainframes and emerging technologies.

Greg Smith is a Software Engineer developing data analytics solutions for the HTAC platform. Greg is the primary developer, and customer engagement lead, for the HTAC “Macro Hunter” component.

Russ Teubner started his presentation by saying that integration analytics was needed because you can’t fix what you can’t see.

Modern mainframes are connected to the outside world using RPA bots, macros and integration scripts, screen scraping, and inefficient APIs (see Figure 1). Where these integrations are inefficient, they inject latency, degrade the quality of service, add transactional load, waste MIPS, compromise return on investment, make it difficult to modernize apps, and create a bias against the mainframe.

Russ used HTAC to help illustrate the problem. HTAC is a diagnostic platform designed to find and analyze inefficient patterns of CICS integrations. It can be used to identify the most problematic integrations, which can then be fixed.

Russ said that most organizations have tools to evaluate the efficiency of each “silo”. However, they can see the “trees” but not the “forest”. They cannot track a mainframe load back to the origin. They cannot assess the business purpose and value. And they cannot assess the true cost. Optimizing each silo does not ensure that the overall integration is efficient.

Integration analytics allows users to see the “forest”, not just the “trees” – and understand what is driving their mainframe workload. They can track transaction activity back to the origin. They can assess the business purpose and value. And they can analyze the performance and cost of the integration.

Figure 2: Why automation is problematic

High Latency
Each request/response requires a full-travel across the network.

High Overhead
Each request/response passes through many System Z layers/components.

Higher Volume
The authors of macros and RPA bots are not application SMEs and don’t always use the application in the most efficient manner.
What Russ and Greg had found was that one style of inefficient integration was predominant: client, server, or cloud-based programs/tools (off the mainframe) automating the execution of screen-oriented mainframe apps. It doesn’t matter how old or new the tool may be, they are using Terminal Emulation and screen scraping to achieve integration. Russ gave some examples such as: Terminal Emulator scripts and macros (eg Rumba, Attachmate, PCOMM); Excel macros using embedded VBA scripts; IBM HATS macros; and UiPath RPA bots.

Figure 2 illustrates why this is problematic. What’s going on behind the scenes with HTAC: Macro Hunter is illustrated in Figure 3.

HTAC: Macro Hunter uses dashboards to illustrate exactly what is going on behind the scenes. Greg Smith talked the user group through some examples, showing the menu allowing filtering and enabling visualizations. Days, hours, and minutes could be used for RPA time distribution. Bubble charts showed CPU vs duration. And Pareto charts picked put the top 10 RPAs per category.

Russ then gave a live demo showing how the product could be used.

In the example it picked out a commonly-executed RPA sequence that accounted for more real time (latency) and CPU time than any other sequence. Russ said that sometimes it takes a curious human to spot a bad macro/bot! In the example, a human could ask the questions, “Why is the CLEAR key used so frequently?”, and, “Why is it used back-to-back?”.

A copy of Russ Teubner and Greg Smith’s presentation is available for download from the Virtual CICS user group website at https://itech-ed.com/virtualcics/presentations/CICSAnalyticsSep22.pdf

You can see and hear the whole user group meeting at https://youtu.be/iY6plF4Zf64

**Meeting dates**

The following meeting dates have been arranged for the Virtual CICS user group:
• On 15 November we have Ezriel Gross, Principal Solutions Advisor at Rocket Software, who will be discussing, “OMEGAMON for CICS on z/OS 5.6 and CICS Performance Analyzer for z/OS Next Release and Features”.

• The following meeting is on 10 January, when Todd Havekos, Senior z/OS Performance Consultant at IntelliMagic will be discussing “New Ways to Analyze CICS Transaction and Statistics Data”.

We are using Zoom for the user group meetings.

CICS articles and blogs

Troubleshooting WLM Missed Goals with CICS Transaction Data: Integrated Visibility into SMF Data by Todd Havekost (2 June 2022). You can find the article at: https://www.intellimagic.com/resources/zos/blog/troubleshooting-wlm-missed-goals-with-cics-transaction-data/

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 itech-ed.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.