

“Did You Say Mainframe? CICS TS V5.4: Microservices with Matthew Webster” Transcript

Nick	Hi and welcome to the “Did you say Mainframe” series of podcasts. This is where we interview technical experts on both the software and hardware side of the mainframe business. And today I’m thrilled to say we are joined by Matthew Webster, from the CICS Development team and Matthew is here to talk to us today about Hill 3 for CICS Transaction Server V5.4 and that’s microservices and the z/OS Provisioning toolkit, so Matthew, thank you joining us today.
Matthew	Thank you for having me Nick
Nick	So you’re here to talk about Hill 3 and specifically CICS microservices and the z/OS Provisioning Toolkit. Both these evolved out of the CICS Beta programme, the open beta, could you just expand a little bit on what the value is and what these entail?
Matthew	Yes, Microservice architecture really is an application self contained aligned to a specific business capability typically accessed by a RESTful API that can be independently deployed. So CICS has a strong history of enabling API access to functionality so what we wanted to bring to that was the ability to independently deploy that functionality and so now what we are calling the z/OS Provisioning Toolkit started last year as part of the CICS TS V5.4 open beta and then evolved in to what we have today.
Nick	When did the CICS Provisioning toolkit take on this aura of the z/OS Provisioning Toolkit?
Matthew	We had to Betas last year [2016] one in July and one in October specifically to solicit customer feedback and we had two very useful pieces of feedback during that process when it was still called the CICS Provisioning Toolkit. The first one was they liked what they saw with provisioning CICS, they pointed to us that CICS was only part of the picture and that they made considerable use out of other middleware products such as MQ, DB2 and IMS and were also interested in the new products we are developing like z/OS Connect – that was the first piece, so we needed to look at those. The second piece was that if they were to give self service access to developers there were a number of other issue that we needed to look at like controlling the access, and to do with the admin access they would need. So when we came to GA we took a mini pivot, and we GA’d with both CICS and MQ and have subsequently added more middleware products to that so we’re set to embrace the set of middleware products we need to support and we also pre-reqed, IBM Cloud building and Management for z/OS that brought in the controls and access mechanisms needed so that developers could really self service provision their own environments with the Provisioning Toolkit and part of that was to change the name to the z/OS Provisioning Toolkit where entitlement comes to anyone with Version 2 of z/OS.
Nick	So it sounds like you can spin up a CICS region if that’s what you want to do clone it and produce an environment for your developers or your sys progs. To work in, is that right?
Matthew	Yes, so what you get with the z/OS Provisioning Toolkit is 3 things, firstly you get workflows for CICS or MQ or z/OS Connect that enables you to provision that environment, secondly you get a very simple command line utility that a developer can use to self service provision and environment that they need and then we have examples of the types of scenarios that you might want to support

	so for example, z/OS Connect embedded, Liberty, Web Services, and Development can use that command line utility with those examples to spin up an environment in as little as two minutes
Nick	Wow, and presumably deprovision just as easily
Matthew	Absolutely, so the whole idea is that total access is provide through that Command line interface, provisioning, starting stopping and then tidying up the whole environment from that space so it's something we think will appeal to even non-mainframe developers who are not familiar with 3270, green screen type interface.
Nick	I can see that it would be almost like a little sandbox for someone to learn, play with new technology in CICS.
Matthew	I think we know that developers want to experiment and want to be able to try things out and if that means sharing their environment with somebody else or wait weeks for that environment to come, then the opportunity has passed. So one of the opportunities will be to allow the developers even on the mainframe to experiment with their ideas.
Nick	Now the microservice technology you were talking about earlier, that comes integrated as part of CICS doesn't it?
Matthew	Yes, when we GA'd with CICS and MQ one of the scenarios we supported was embedded z/OS Connect, that was something new that came out last year. So that enables somebody, if they are developing a microservice with a RESTful API, they can stand up the entire environment needed to give access and publish an API to an existing application we think in 10 or 15 minutes. We followed that up with version 1.0.1 of the provisioning toolkit which now provides support for a standalone z/OS Connect which can then connect to CICS. So we keep on adding scenarios and we keep on adding support for middleware.
Nick	The z/OS Provisioning Toolkit is a separate download from CICS isn't it?
Matthew	Yes absolutely, like we have another of other things like the z/OS Explorer for example, or plug-ins for UrbanCode Deploy, it is an independent ZIP download, very simple, download that, it contains a pax file which you download to the mainframe and that contains everything you need to get started. So if you use your favourite search engine and search for z/OS PT you will very quickly come to our product page and all the instructions and pre-requisite products are listed there.
Nick	OK thank you for explaining that Matthew. Is there any extra material like BLOGS or Redbooks or papers or anything that people could get further information on this?
Matthew	Yes, so currently we are to be found on the mainframe DevOps website where myself, colleagues from the other products have put a number of Blog posts describing examples of how to provision other different middleware products using z/OS PT, so if you search for z/OS PT you will find those Blog posts.
Nick	Excellent, thank you very much Matthew, thank you for joining us today.
Matthew	Thank you for the opportunity to speak.
Nick	So that about wraps it up for this podcast, for more details please go to our devcenter https://developer.ibm.com/cics/podcasts/ . Join us again for another interesting topic related to the mainframe but for now this is Nick Garrod saying thank you for listening.

