

## **z/OS Connect**

Nick – Hi, and welcome to the “DID you say Mainframe?” podcast series. This is where we regularly interview IBM technical experts who can help you to understand important IBM mainframe hardware and software issues. I'm your host Nick Garrod.

Now today we are joined by Paul cooper from the CICS development team and he's come to talk to us about z/OS connect, so Paul thank you for joining us. so you're here today to talk about z/OS connect, now this is a term that I've certainly heard but I'm unsure whether its technology or a product part of another product an offering itself, could you expand and perhaps explain a little bit about that?

Paul - Yes of course, so z/OS connect is a set of shared capabilities and we're making available for several different ibm products we have it in we have it in WebSphere liberty in IMS, and CICS, and so it's not an separately available product in its own right but what it does is it allows mainframe assets which are owned by the various different products to be exposed and made available to the outside world in a consistent shared fashion so we're aiming at having the same experience or a very similar experience for each of these diverse different products.

Nick - Okay I've heard talk of systems of record which i guess is the mainframe and then I've heard the term systems of engagement, I guess that's these devices you were referring to?

Paul - Absolutely so mobile devices we could be talking about pads or phones the kind of device that typically someone carries around with them and these devices have various characteristics in common despite the various form factors but one of the typical things is that often programmed using scripting language and the scripting languages in general tend to make use of JSON, JavaScript object notation which is a format for representing structured data but its particularly consumable and popular amongst the kind of developers who work with these kinds of devices. And z/OS connect provides a mechanism by which JSON can be used conviv3ntly to access data from mainframe applications shall we say.

Nick - Okay, so I think I've got that now how would this have been done for other types of transports in the past?

Paul - Okay so it's very much another option within our portfolio of transports so it's very similar in some respects top what we've done in the past with xml and soap based web services where you can use gateways or brokers to access mainframe assets using xml and soap based protocols JSON through z/OS connect follows exactly that same kind of pattern you can send a JSON request to the mainframe, mainframe can convert that request into a form that makes sense to the existing applications drive those application access data and return responses in a form which is convenient to the request

Nick - So its sounding to me like this term JSON that you're using is quite key here and it's very key with new workloads so why is that?

Paul - Okay so JSON has become very popular recently and part of that is for its reputation as being an efficient from of representing data if we compare it to xml which we've been

using a lot for the past decade, JSON in general represent the same data, the same structured data in a more efficient textual representation and interchange format so the physical number of bytes required to represent a piece of information would generally be shorter and that's measurable, that genuine however, it is worth emphasizing that the information that your representing is the same, and so whilst the amount of time you spend passing through that data for angle brackets or curly brackets might be ever so slightly less, the processing that's driven as a result of that information will be identical. So yes, smaller data formats but not necessarily more efficient programs but nonetheless that efficacy is one of the reasons why folks are interested in exploring JSON and its just one, another very reason why folks like the look of JSON is that in general applications that work with JSON tend to be less tightly coupled to the data in a way that means that should that data change, perhaps due to a new version of an application being rolled out you can imagine a version 2 representation of some structure arriving. There's a better chance that a JSON based application will fail gracefully or just accept what it's received and do the best it can, compared to an xml based application where it's much more likely that the slightest change will result in an error. So it can provide greater flexibility for rolling out changes.

Nick - Okay I understand that so why would one of our listeners perhaps want to adopt z/OS connect?

Paul - z/OS connect although the capability it provides has been available in other forms previously, there are several advantages, one is that we are making it consistent across various product offerings so if you are using more than one of the IBM mainframe products there's a better chance of reusing skill and capability and sharing concepts. speaking particularly from a CICS point of view we certainly found in our internal benchmarking that z/OS connect has quite a different performance pattern compared to some of our previous offerings, most notably more of the path length is implemented in java which is inherently off loadable to the application and system processors therefore, it is possible that you will see reduced costs in that environment, obviously mileage will vary

Nick - but that's quite an incentive for people to take this route

Paul - It's certainly a consideration.

Nick - So when is it available?

Paul - Well its actually available already, its included as part of WebSphere Liberty so if you have the most recent version of liberty, you will have a z/OS connect capability there, its available embedded within CICS for transaction server version 5.2, its juts a PTF you have the apply and then it's there

Nick - And its available in IMS as well I believe. So that's really interesting Paul thank you very much for taking the time to illustrate this to us today.

Well, that wraps up this podcast discussion. To find out more about CICS, please go to the description for this podcast at: <http://www.ibm.com/software/os/systemz/podcasts/websphereonz/>

Join us next time as we talk about another important mainframe topic. For now, this is Host saying “Thanks for listening”.