

FINAL

**DGI UPDATE  
May-June 2006**

A newsletter from Drummond Group Inc. <<http://www.drummondgroup.com/>>

**CONTENTS**

**Commentary: How Does Full-Matrix Testing Differ from Other Test Methods?**

**Test Schedule**

**Test Programs Supported by DGI**

**FAQs about CSOS**

**2006 Events**

**Press Releases**

**DGI Research Report Services**

=====

**Commentary: How How Does Full-Matrix Testing Differ from Other Test Methods?**

DGI interoperability certification programs use a software testing method referred to as "full-matrix testing." The full-matrix testing method enables a large number of products to be certified with a very high level of assurance that each product can successfully interoperate with each and every other product in the test group. In other words, full-matrix testing creates an interoperable community of products.

Full-matrix testing

The matrix is the set of test cases. In full-matrix testing, all test cases are executed by each test participant against each and every other test participant. Participants take turns being the partner who initiates each test case. When the group gains confidence that the products are highly interoperable, testing is repeated. This repetition ensures that any code or configuration changes made to enable interoperation with a specific partner product have not affected the interoperability of the entire group of products. In full-matrix testing, all possible combinations of test partners are tested, and testing is continuously repeated in what might be referred to as a complete many-to-many test.

A common complaint in full-matrix testing is the large numbers of tests which must be run since full-matrix testing requires that all participants both initiate and receive tests with all of the other participants. DGI has developed InSitu™, a patent-pending test automation technology, to address this issue and it has successfully been utilized to run large groups of test participants in a short time frame. Of course, there are many alternatives to a full-matrix approach. Some of the most commonly seen methods for testing groups of software products are onsite plug-fests, pair-wise testing and reference platform testing.

#### Onsite Plug-fests

Standards development organizations and commercial software companies sponsor onsite plug-fest testing. Typically, each software company sends a representative with a copy of their software product to a single location and the products are tested against each other while the representatives sit in the same room running tests for a few days. Test results are usually not published and there is no formal certification. Onsite plug-fest testing is often done when a new software standard is introduced. The primary goal is to find and fix problems with the standard and gain visibility for the software standard. Onsite plug-fest testing limitations include scarce resources and time constraints. There is simply not enough time for each product to be tested against all others, to add additional support from the representative companies or for tests to be repeated. Additionally, insufficient time is usually not allotted to fix problems sufficient for production or implementation.

#### Pair-wise testing

Some organizations test products in a pair-wise fashion. In other words, products are tested for interoperation with a subset of a group of present products. Pair-wise testing can be fast and require few resources, but its main limitation is that it lacks the rigor of full-matrix testing. It may leave open the risk that changes made to interoperate with a specific partner product are not tested against other partner products. There is no assurance that products will work across all the community of tested products.

#### Reference platform testing

Another common approach is reference platform testing where multiple products are tested and certified against a single "reference" platform. Pros of reference platform testing are that it can be formalized and can deliver very clear results. For example, it can be confidently stated that version two of product A is interoperable with version two of the reference platform. In our experience, it is very easy to underestimate the difficulty of building and maintaining a reference platform.

One of the key issues is who will provide the reference platform. If a single commercial vendor provides a reference platform, then there are competitive and intellectual property issues among the group of vendors being tested. If the reference platform is sponsored by a neutral consortium, then issues focus on how to fund the development and maintenance of an application which will never draw funding from commercial release. There also are problems caused by the sheer amount of resources needed to maintain the reference

platform as new versions of the standard-under-test are released and new versions of products are released.

There are several more basic issues that might be easily overlooked. Reference platform testing does not address interoperability testing. Two products that are each by themselves interoperable with a reference platform are not necessarily interoperable with each other. Another very basic question is how the reference platform itself is tested to comply with the standard-under-test. Reference platforms are often the victims of scope-creep, by definition they must implement the standard-under-test and be able to handle, or, at least, somehow report on deviations from the standard. In other words, the design requirements for a reference platform are typically larger and more complex than the design requirements for the commercial products-under-test.

Summary

DGI firmly believes that full-matrix testing delivers an extremely high level of proof of interoperability among a group of software products and effectively recreates the “real world” of how software interacts in B2B commerce. If the goal is not certified interoperability, then the other methods of testing described here might be used and are often used by DGI for testing with various groups. However, in our experience, certification of interoperability of software products using full-matrix testing assists in driving adoption of the standard, offers the users a level of assurance that this product has been tested by a neutral third party and helps the certified software company sell more products. It’s a win-win.

For more information on InSitu, see: <http://www.drummondgroup.com/html-v2/insitu.html>

=====

**Test Schedule**

**AS2 In the Queue NEW**— Runs July 10 – Nov. 11, 2006, for products that will be joining the Feb. 2007 AS2 Interop round. (Participants also must complete InSitu-AS2 by January 2007 in order to qualify for the February 2007 AS2 Interop.)

**Register by June 12**

**AS2 In the Queue CONTINUE**—(not yet InSitu enabled) This test began May 15 and will continue through June 30. (Participants also must complete InSitu-AS2 by Aug. 25, 2006, in order to be eligible for the September 2006 AS2 Interop round.)

**AS2 In the Queue CONTINUE**—(for those products already InSitu enabled) This test is scheduled from July 10 through Aug. 25 for products looking to rejoin AS2 Interop testing in September 2006.

**Register by June 12**

**AS2 Interop**—This test is scheduled from Sept. 11 to Oct. 13. Only products which completed AS2-1Q06 or AS2 ITQ New or AS2 ITQ Continue are eligible.

**Register by Aug. 7**

**ebMS ITQ**—(for those products new to ebMS testing) This test is scheduled from Sept 4 through Oct. 14.

**Register by Aug. 7**

**ebMS Interop**—(for those products new to ebMS testing) This test is scheduled from Oct. 16 through Dec. 8.

**Register by Sept. 8**

**To sign up for DGI test rounds, please visit:**

<http://www.drummondgroup.com/html-v2/register-generic.html>

**DGI's 2006 Test Calendar**

View the 2006 Test Calendar online at:

<http://www.drummondgroup.com/html-v2/test-calendar.html#2005>

**For additional information about interoperability test rounds in 2006, please contact:**

Yoko Nakagawa

Email: [yoko@drummondgroup.com](mailto:yoko@drummondgroup.com)

Telephone: (512) 826-2938

=====

**Test Programs supported by DGI**

**Drummond Certified.** This includes test and auditing information regarding the CSOS standard. Current CSOS information and test results are listed at:

< <http://www.drummondgroup.com/html-v2/csos-cert.html> >

**Global Data Synchronization Network.** Current information and interoperability test results are listed at:

< <http://www.gs1.org/> >

=====

**For information about CSOS Audits conducted by DGI and CSOS FAQs, please see:**

< <http://www.drummondgroup.com/html-v2/csos-faq.html> >

=====

**2006 Events**

DGI representatives regularly join other solution providers and technology leaders at various conferences and trade shows as guest speakers or exhibitors. To learn more about events that DGI plans to attend this year, click on the sites listed below.

- 1) **2006 U Connect Conference**—June 6-8, Gaylord Opryland Resort & Convention Center, Nashville, TN, <http://www.uc-council.org/uconnect>
- 2) **2006 HDMA Distribution Management Conference & Technology Expo**—June 7-10, JW Marriott Desert Ridge Resort & Spa, Phoenix, AZ  
<http://www.healthcaredistribution.org/meetings/distribution.asp>

=====

## **Press Releases**

### **6 Software Applications Drummond Certified Global AS1 Interoperability**

FORT WORTH, TX - May 23, 2006 - Drummond Group Inc. (DGI), the leading software and conformance certification company, today announced that six products recently completed the Drummond Certified—AS1-2Q06 interoperability testing program. By certifying interoperability amongst a group of commercial software products, this program promotes the adoption of standards-based software for use in supply chains worldwide. Products from Axway-Cyclone, Inovis, Inc., iSoft Corporation, nuBridges LLC and TIBCO Software, Inc., successfully completed the AS1-2Q06 interoperability test round.

#### **See entire release:**

< <http://www.drummondgroup.com/html-v2/press.html> >

=====

## **DGI Research Report Services**

1) "AS2, ebXML or SOAP: Which Messaging Standard to Select for Your Supply Chain and Why" – now only \$199 USD -

<<http://www.drummondgroup.com/html-v2/research/soap.html>>

DGI research continues as it highlights three Internet messaging standards: AS2, ebXML and SOAP. It offers in-depth comparisons on which standards to implement based on technology and business criteria, and illustrates how they can accommodate the majority of today's business messaging needs.

2) "Making Sense of AS2: An Implementation Guide" - \$95 USD

<<http://www.drummondgroup.com/html-v2/research/as2-guide.html>>

In a balanced, vendor-neutral manner, "Making Sense of AS2" provides an introductory overview and covers the basics of AS2 implementation. Guidance includes how to resolve common technical issues faced by network administrators while implementing this technology to securely and reliably transport data over the Internet.

++++  
++++

Copyright © 2006 Drummond Group Inc.

Drummond Group Inc. (DGI) is an independent, privately held company that works with software vendors, vertical industries, supply chains and the standards community to drive adoption for

standards by conducting interoperability and conformance testing, publishing related strategic research and developing vertical industry strategies. Founded in 1999, DGI represents best-of-breed in the industry on linking horizontal infrastructure technologies, standards and interoperability issues with the needs of vertical industries such as retail, grocery, health care, transportation, government and automotive. For more information, please visit [www.drummondgroup.com](http://www.drummondgroup.com), or email: [info@drummondgroup.com](mailto:info@drummondgroup.com).

---

To subscribe or unsubscribe from this list, use the subscription manager:  
< <http://www.drummondgroup.com/html-v2/newsletters.html> >