

OSDL ISV Open Forum Session Notes

Date/Location:

Boston – Westin Hotel
2/15/05 from 5 to 7 PM

Introduction:

Craig Thomas of OSDL presented an overview of where we were, where we are now and where we are headed. See the slide set for details.

Binary Regression Testing Overview and Status:

Tim Witham of OSDL presented an overview and current status on the OSDL Binary Regression Testing project. See the slide set for details.

Discussion/Comments on Binary Regression Testing:

Comment:

A Tinder Box is an important part of this project. We would like to ensure that OSDL provides this facility.

Answer:

Tinder box is a part of the build cycle. But not all projects use tinderbox or even appreciate what it can do for you. I think that we need to examine projects on a case by case basis for applicability.

Question:

Will you support combinations of packages within the Working Set? Or just the most recent packages that are available?

Answer:

There is a build set which will be a snapshot of the Working Set. This is what will be tested. We feel that this will move at a rapid pace and will probably more than enough work to keep us busy.

Question:

Will the versions of the packages being tested be reported?

Answer:

Yes. That is part of what is being tracked.

Comment:

The timeframe for reporting that is useful for OSS projects, eg. Mozilla, is within 2 days of identifying the problem.

Answer:

The intent is to turn this around as quickly as possible. The exact target times will depend upon how in depth the testing is. But, this type of timeframe should be reasonable for basic testing.

Question:

What will cause OSDL to revisit the packages that are included in the Working Set?

Answer:

The basic platform is likely to stay the same, eg kernel and gcc. However, over time as testing is done, difficulties will show themselves and candidate packages can be added if testing shows that there is value to adding them.

Comment:

There is the potential for increased value if the testing is integrated within the OSS development teams. There are several teams that can be expected to embrace this right now as they are more proactive.

Answer:

Yes. We agree that this has potential.

Comment/Question:

ISVs are writing on the currently supported versions of distros, which can lag up to 18 months ahead of the current development cycle. Further, customers can be using features in the currently supported versions of the ISV application that may be dependent upon that current version which are “unknown” to the ISV, ie that the dependencies are unknown at the time. How are ISVs going to be able to correlate the results of BRT testing to their current work?

Answer:

This is something that will get addressed over time. Initially, the early upstream testing that is done will lag up to 18 months behind current releases, but over time there will be a convergence because problems will be found much earlier in the development cycle.

Comment:

That does not answer our immediate concern about how to correlate the results in the short term. We still have a concern that we will spend time cross-correlating the work done with BRT for quite some time.

Answer:

Unfortunately, that is true. However, you have to keep in mind that we will be in a position of having knowledge that was previously not known and we will also have the information much sooner than we do now, so it seems like any short term efforts would be worthwhile to prevent issues with applications that are shipped.

Comment:

This is not really a question about BRT, but just a comment that the real problem that we face is that there are different architectures, patches and releases, so the problems are multiplicative.

Answer:

There is not immediate effect that BRT has on this, but we understand that you have to reduce the number of 'variables' to be able to support multiple platforms.

Question:

Where will the tests come from?

Answer:

The ISVs will provide those. They are in the best position to know their own applications. But, OSDL will also need to provide support to integrate tests into BRT, if needed.

Comment:

It would be helpful if OSDL would provide tools to help ISVs download and run in their environment.

Answer:

We agree that it should be easy for the ISVs to use. Since the BRT framework is open source anybody should be able to download the framework to run their tests.

Comment:

It is helpful if OSDL can provide a test “farm” that the ISVs have access to as part of BRT. It is not feasible for the the ISVs to individually build large test environments.

Answer:

OSDL can act as a catalyst for this and can make significant resources available, but are limited to the equipment that is available at the lab or through equipment donations.

Comment by OSDL:

We fully intend to have the ISVs and distros be able to download the BRT tests and run those externally to OSDL. This is an open project and the tests are open.

We recognize that some companies may not be able to run the tests at OSDL due to our open publishing of the results. Obviously, we hope that everyone can report through OSDL, but we are prepared to provide a protected environment at OSDL to report success/failure of tests for those that need it. In the case of a failure, we will need to report the library name and details for that.

Comment – follow up:

We think that in that distributed environment of testing it will be even more difficult to track the errors to the current distributions that are supported. Is there a way we could track the tests, maybe by distro name/release?

Answer:

Yes. It could be used to do that as we are keeping the results in a database. However what we are trying to address at OSDL is the upstream testing and that is package version based. A distro name/release really wouldn't be meaningful. However if other folks reported back this information I'm sure we could work on getting it into a database. T

Comment by OSDL:

We expect that one of the biggest impacts of BRT will be that over time there will be convergence between the upstream changes and the released versions on the distros, which can ultimately reduce the time to market. If we get a significant amount of ISV binaries that we run, the total set of those binaries will essentially provide good code coverage and increase the likelihood of finding problems. Further, the overall coverage is much better than an individual ISV can do by themselves. So the combined ISV community is essentially pooling resources to improve the test coverage.

Server Issues Breakout - Discussion Summary

The goal of the session was to explore further the set of problems brought up from the last ISV forum and look at some emerging issues within the server arena to determine 1 or 2 “pain points” for the ISVs that the new OSDL ISV initiative can use as a starting point to work on.

After some discussion, this is the total set of issues that were identified as candidates for further investigation:

Local Crash Dump – this is a necessity for ISVs. This is a serviceability issue.

Common core set of packages for all distros.

Batch s/w needs common services

Common install/de-install at application level

Common configuration – create a base layer

Standard packaging format

Library changes – eg. Glibc, C++

Drivers

The top 2 priorities:

- 1) Common install/de-install, configuration, package format
- 2) Drivers

Desktop Issues Breakout - Discussion Summary

The goal of this session was to expose the ISV audience to the work being done within the DTL initiative to build the recently released 1.0 capabilities document. We wanted to identify the top 3 areas that are the “pain points” for the ISVs on the desktop, as ISVs are an important part of the ecosystem for the desktop.

Top 3 issues:

- 1) Want to manage the environment the way that is currently done with the Windows-based infrastructure, using the same management tools and processes.
- 2) Static Linking enables portability across versions and distributions. Want to define best practices for this.
- 1) Most of the problems that ISVs face in cross-distribution portability appear to be due to gratuitous differences across distros, such as filesystem hierarchy and varying package revisions and names.

Next Steps

OSDL is forming an ISV member initiative to further define the needs and help drive solutions. We are also setting up an open discussion list that corresponds to the ISV open forums which will be held twice per year. So, ISVs have a couple of options. You can talk to us a couple of times a year and provide some input on the open forum, or you can get involved in determining the requirements and their solutions in more detail. We hope that our members will drive the initiative and that those of the attendees of the forums will want to become members and get involved. It is our intent to summarize the work of the ISV initiative at the forums.