



Brace Yourself! With Long Term Support

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What is LTS?

LTS = Long Term Support

It's an infrastructure for maintaining old Eclipse releases

It's a dating service to connect users needing fixes to developers

It's a way to safeguard products and solutions built on Eclipse

What it's NOT

It's not a release train (not to be confused with "Ubuntu LTS" for example)

It's not a help desk

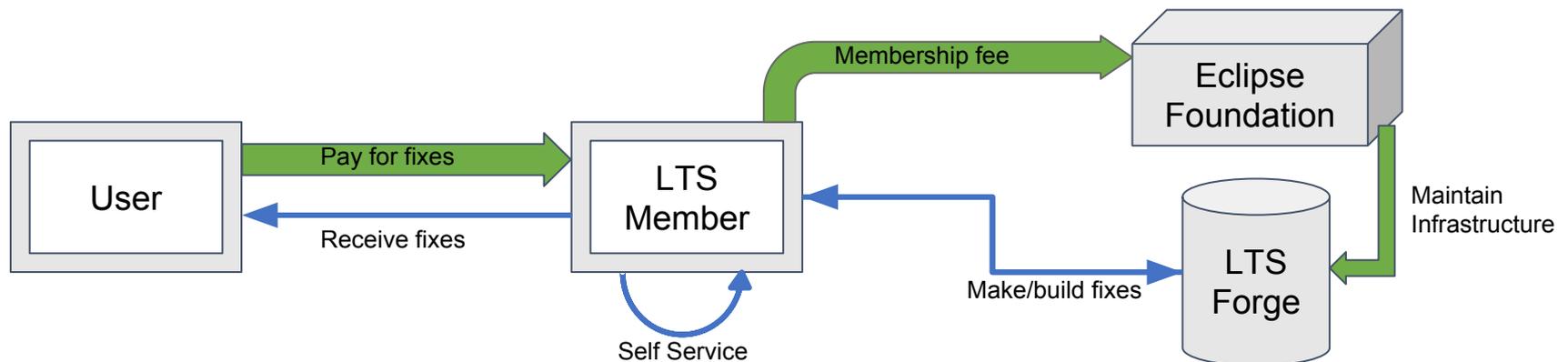
It's not free (but don't be scared)

Not Free?

There are 3 entities involved

- 1) Eclipse Foundation invests in maintaining infrastructure.
- 2) LTS members pay fees for access to the infrastructure to cover the costs of infrastructure (not for profit).
- 3) Users needing fixes pay LTS members for updates.

Pricing is negotiated between LTS members and their clients.



Who Would Need Fixes on Old Code?

Commercial products

- Paying customers expect fixes without being forced to upgrade
- Support durations is often 5 years or more

Custom development tools

- Some industries require supported tools for years, even decades

Teams locked into specific Eclipse versions

- Some won't have a choice for the version they are based on
- Part of a larger project
- Providing add-ons to 3rd party software



What Could Go Wrong Anyway?

Lots of things!

- Security bugs may require changes to plug holes
 - POODLE, Heartbleed, ShellShock, etc
- New OS versions arrive
- New hardware platforms arrive
- Shifting standards
- Government requirements change



Don't get stranded!

New Problems on Old Programs

Time is not kind to software

Even perfect code can run into issues over time

- Dependencies get upgraded
- New security issues
- Operating systems go out of service



Traditional Choices for Support

- Participate in the projects you rely on
 - Add committers
 - Influence changes from within
- Bring a branch into your own development team
 - Control all changes
 - No need to earn commit rights
 - Still need to invest in development expertise
- Keep current with project releases
 - Adopt new releases frequently
 - Can be disruptive
- Hope it's stable and won't need much work
 - Good luck with that....



Running Out of Options

Eclipse developers fix bugs in the newest version (HEAD)

Backports aren't routinely done

It's expensive to apply fixes in unfamiliar code

- Setting up the build environment
- Maintaining the hardware
- Understanding the code logic
- Performing the right tests



How To Get Support

Two ways:

1. Pay an expert to provide you with support
 - Find a domain expert willing to sign a contract
 - Pay them a reasonable amount for the service

2. Do-it-yourself
 - Handle just the fixes you need
 - Not too expensive if the infrastructure is stable and reliable and you have the expertise in-house

Eclipse **Long Term Support (LTS)** makes both of these options possible.

What LTS Provides

LTS provides two important ingredients to the support story

1. A **marketplace** to connect users with service providers



2. A stable **infrastructure** for maintaining & building legacy Eclipse content



LTS Jar Signing

New!

LTS now has its own certificate

Changes built in LTS can be signed with the LTS certificate.

Benefits:

- Gives users confidence in knowing where changes originate
- Identifies where bundles were built
- Uniformity of bundles built by other LTS members

‘jarsigner -verify’ output will look like this:

```
[entry was signed on 10/23/15 6:45 AM]
X.509, CN="Eclipse Foundation, Inc.", OU=Long Term Support, O="Eclipse Foundation, Inc.", L=Ottawa, ST=Ontario,
C=CA
[certificate is valid from 5/24/15 8:00 PM to 5/29/18 8:00 AM]
X.509, CN=DigiCert SHA2 Assured ID Code Signing CA, OU=www.digicert.com, O=DigiCert Inc, C=US
[certificate is valid from 10/22/13 8:00 AM to 10/22/28 8:00 AM]
X.509, CN=DigiCert Assured ID Root CA, OU=www.digicert.com, O=DigiCert Inc, C=US
[certificate is valid from 11/9/06 7:00 PM to 11/9/31 7:00 PM]
```

Connections With Other Working Groups

New!

Eclipse Working groups can become Steering Committee Members of the LTS Working Group provided that USD 30,000 paid by the Working Group to the Eclipse Foundation is earmarked to support the operation of the Eclipse LTS infrastructure, and other LTS activities.

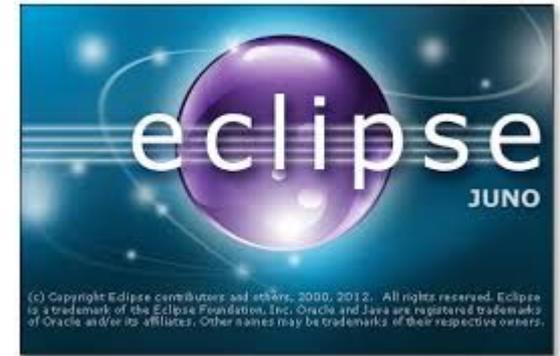
Such Working Groups will receive the following benefits

1. The Working Group is eligible for one seat on the steering committee of the LTS Working Group.
2. Members of such working groups, excluding Guest Members and Invited Members, are eligible to use the Eclipse LTS infrastructure as Premium Members.

Case Study

Eclipse Juno (4.2) shipped in June 2012

You wrote an amazing tool based on it



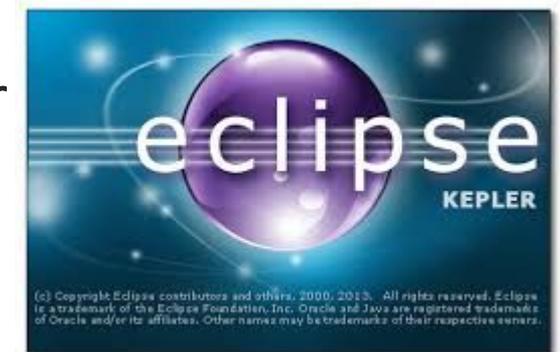
Microsoft released *Windows Server 2012* in Sept 2012



Eclipse Kepler (4.3) shipped in June 2013

Kepler recognizes the new Windows Server

Your amazing tool does not!



Case Study

An EclipseSource customer hit this problem

Uh oh... What are the options?

1) **Tell users to stay on old operating systems**
 Unpopular, especially as they go out of service



2) **Migrate your amazing tool to Mars**
 Costly and time consuming



3) **Get a fix for Juno**
 That's the ticket! But the fix is in core Eclipse code...
 Don't worry - LTS can help



Case Study – Finding a fix

Bug 403069 - Bundle-NativeCode: osname=win32 isn't matched by Windows Server 2012 ([edit](#))

Status: RESOLVED FIXED ([edit](#))

Product:

Bug was fixed for the **Kepler** release by [bugzilla 403069](#)!

Hey, great, it's fixed... but we're not using Kepler yet.

The community is busy developing the newest Eclipse version.

How to proceed?

Case Study – Using LTS

Find an LTS member to help

- They understand the code
- They can build it on an Eclipse maintained infrastructure via LTS
- They can avoid regressions and aggregate other necessary fixes
- Negotiate a reasonable fee for the service

Self-serve as an LTS member

- You are comfortable making the code change
- LTS handles the build environment for you
- Control exactly what changes you are picking up

Case Study – What EclipseSource did

Self-serve approach

- Brought latest code changes into the 4.2.2 maintenance branch in LTS (Juno)
- Fixed not only *Windows Server 2012*, but also other new versions that could bite us (even Windows 10)
- Code changes reviewed by other LTS members for safety
- Delivered fixes to our product to customers
- Fix is available to **all** LTS members!

Case Study – What EclipseSource did

Change 233 - Merged

Update Bundle-NativeCode values in osname.aliases with current names

Add all new OS aliases for Windows and WindowsServer versions up to Windows 10 to the list of OS name aliases based on the following bugs:

- Bug 403069 - Bundle-NativeCode: osname=win32 isn't matched by Windows Server 2012
- Bug 423970 - Bundle-NativeCode cannot work on Windows 8.1 and any new Windows release
- Bug 454047 - Add "Windows 10" and "Windows Server 2015" to osname.aliases
- Bug 460633 - [osgi] org.eclipse.osgi-3.9.1.v20130814-1242 not supporting windows 2012 r2 server

Change-Id: Ia709861ed5330aac796a604b2e016420bd3a4c68
Signed-off-by: Markus Knauer <mknauer@eclipsesource.com>

Reply...

Owner Markus Knauer
Reviewers Steve Francisco
Project equinox/rt.equinox.framework
Branch R3_8_maintenance
Topic
Updated 8 weeks ago

Cherry Pick Revert

Code-Review +2 Steve Francisco
Verified +1 Steve Francisco

equinox/rt.equinox.framework / bundles/org.eclipse.osgi/core/framework/org.eclipse.osgi/framework/internal/core/osname.aliases

```

Patch Set Base 1 2 3
1 #####
2 # Copyright (c) 2003, 2012 IBM Corporation and others.
3 # All rights reserved. This program and the accompanying materials
4 # are made available under the terms of the Eclipse Public License v1.0
5 # which accompanies this distribution, and is available at
6 # http://www.eclipse.org/legal/epl-v10.html
7 #
8 # Contributors:
9 #   IBM Corporation - initial API and implementation
10 #####
11
12 # This file must be UTF8 encoded.
... skipped 22 common lines ...
35 Windows98 "Windows 98" Win98 Win32 # Microsoft
36 WindowsNT "Windows NT" WinNT Win32 # Microsoft
37 WindowsCE "Windows CE" WinCE # Microsoft
38 Windows2000 "Windows 2000" Win2000 Win32 # Microsoft
39 WindowsXP "Windows XP" WinXP Win32 # Microsoft
40 Windows2003 "Windows 2003" "Windows Server 2003" Win2003 Win32 # Microsoft
41 WindowsVista WinVista "Windows Vista" Win32 # Microsoft
42 Windows2008 "Windows 2008" "Windows Server 2008" Win2008 Win32 # Microsoft
43 WindowsServer2008 "Windows 2008" "Windows Server 2008" Win2008 Win32 # Microsoft
44 WindowsServer2008R2 "Windows 2008 R2" "Windows Server 2008 R2" Win2008R2 Win32 # Microsoft
45 Windows7 "Windows 7" Win7 Win32 # Microsoft
46 Windows8 "Windows 8" Win8 Win32 # Microsoft

```

```

Patch Set 1 2 3
1 #####
2 # Copyright (c) 2003, 2015 IBM Corporation and others...
3 # All rights reserved. This program and the accompanying materials
4 # are made available under the terms of the Eclipse Public License v1.0
5 # which accompanies this distribution, and is available at
6 # http://www.eclipse.org/legal/epl-v10.html
7 #
8 # Contributors:
9 #   IBM Corporation - initial API and implementation
10 #####
11
12 # This file must be UTF8 encoded.
... skipped 22 common lines ...
35 Windows98 "Windows 98" Win98 Win32 # Microsoft
36 WindowsNT "Windows NT" WinNT Win32 # Microsoft
37 WindowsCE "Windows CE" WinCE # Microsoft
38 Windows2000 "Windows 2000" Win2000 Win32 # Microsoft
39 WindowsXP "Windows XP" WinXP Win32 # Microsoft
40 Windows2003 "Windows 2003" "Windows Server 2003" Win2003 Win32 # Microsoft
41 WindowsVista WinVista "Windows Vista" Win32 # Microsoft
42 Windows2008 "Windows 2008" "Windows Server 2008" Win2008 Win32 # Microsoft
43 WindowsServer2008 "Windows 2008" "Windows Server 2008" Win2008 Win32 # Microsoft
44 WindowsServer2008R2 "Windows 2008 R2" "Windows Server 2008 R2" Win2008R2 Win32 # Microsoft
45 WindowsServer2012 "Windows 2012" "Windows Server 2012" Win2012 Win32 # Microsoft
46 WindowsServer2012R2 "Windows 2012 R2" "Windows Server 2012 R2" Win2012R2 Win32 # Microsoft
47 WindowsServer2015 "Windows 2015" "Windows Server 2015" Win2015 Win32 # Microsoft
48 WindowsServer2015R2 "Windows 2015 R2" "Windows Server 2015 R2" Win2015R2 Win32 # Microsoft
49 Windows7 "Windows 7" Win7 Win32 # Microsoft
50 Windows8 "Windows 8" "Windows 8.1" "Windows 8.2" "Windows 8.3" Win8 Win32 # Microsoft
51 Windows10 "Windows 10" Win10 Win32 # Microsoft
52 "Windows NT (unknown)" win32

```

Case Study – Turnaround time

From customer report to delivering a fix:

April 22 to April 24

Just 3 days!

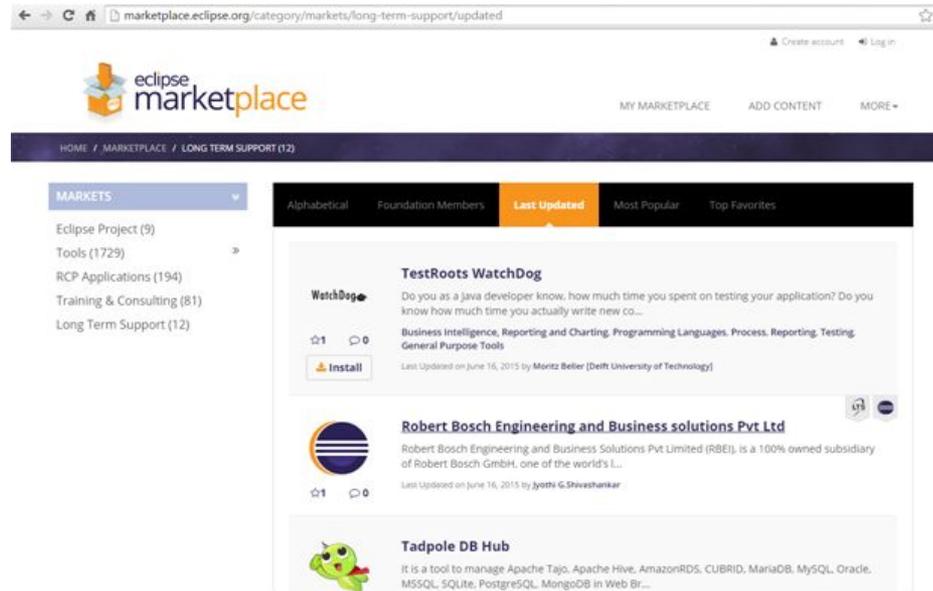


LTS Marketplace

- Users can find companies or individuals willing to provide support
- LTS **does not** dictate any terms, costs or rules
- Service providers can custom-fit a contract for each client
- Service providers are expected to get paid for their time and expertise
- LTS Marketplace is free to use, but the services that clients get are not free

LTS Marketplace

1. Find a maintenance provider
2. Contact them with your needs
3. Negotiate terms



LTS Request for Help

Not sure how to get started? Just ask!

lts.eclipse.org/request-help

Need Help With An Older Release?

Let Us Connect You!

Would you like to engage with subject matter experts? You've come to the right place.
Have you visited the LTS Marketplace? Click [here](#) to see our providers.
Still not sure? Fill out this form and we will get back to you with the information you need to get started.
Just describe the issue you need help with in as much detail as you can, including version numbers, and click 'Submit'.

Name *

E-mail *

Company

Projects

Version

Problem *

Projects Currently in LTS



Eclipse Equinox



Eclipse Project

+ JDT Project

+ PDE Project



Eclipse RAP

Business Opportunities

Are you a subject matter expert?

Ready to make some money?

Become a maintenance provider listed on the LTS Marketplace!

Looking for support so your project can remain viable in the long term?

Need a safety net?

Find a maintenance provider at the LTS Marketplace!

Who Is Steering LTS?

The LTS Steering Committee Members



Links & Resources

LTS web page: lts.eclipse.org

LTS Marketplace: marketplace.eclipse.org/category/markets/long-term-support

LTS Charter: www.eclipse.org/org/workinggroups/ltsiwg_charter.php

Contact us: lts@eclipse.org

lts.eclipse.org/request-help

Mailing List: lts-iwg@eclipse.org

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**Race to Win a GoPro
at EclipseCon EU!**



Play Code Rally at the IBM booth to try and win



eclipsecon Europe

Ludwigsburg, Germany, 3 - 5 November 2015

Evaluate the sessions at www.eclipsecon.org

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