

Fedora

Project and Community Update





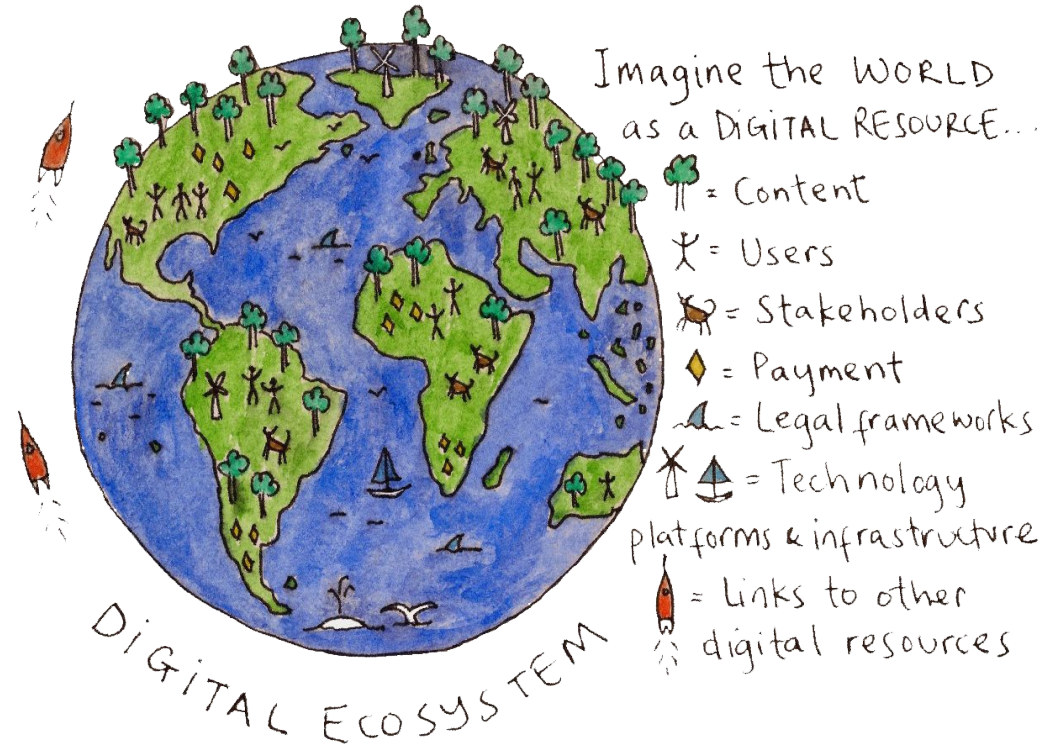
Hello!

I'm David Wilcox

I am the Fedora Product Manager with DuraSpace.

You can find me at dwilcox@duraspace.org and [@d_wilcox](https://twitter.com/d_wilcox)

Our community
is part of an
interconnected,
worldwide, scholarly
ecosystem.



Source: The Digital Ecosystem in the Balanced Value Impact Model (illustrated by Alice Maggs);
<http://simon-tanner.blogspot.com/2014/09/do-you-understand-your-digital-ecosystem.html>

DuraSpace open source projects



FedoraTM



DURASPACETM

An Eye Toward The **Future**

- ▶ Fedora is linked data infrastructure
- ▶ Built on modern web standards
- ▶ Focused on interoperability

Fedora stays true to its roots while planning for a future of linked data and interoperability

Guiding **Principles**

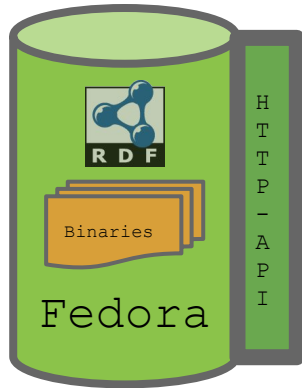
- ▶ Durability
- ▶ Data portability
- ▶ Standardization
- ▶ Interoperability

Understanding The **Ecosystem**

- ▶ Fedora is just one technology amongst many
- ▶ Institutions want interoperability
- ▶ Data should move freely between applications

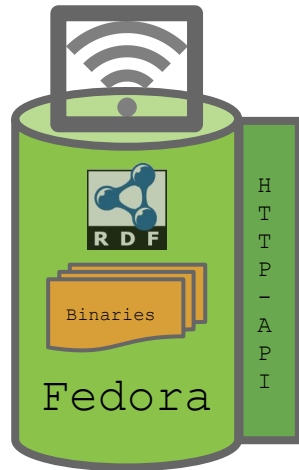
Institutions use many different technologies that need to work together

Component of Ecosystem



Sources: <https://www.w3.org/RDF/icons/>
<https://pixabay.com/en/icon-communication-sender-antenna-157359/>

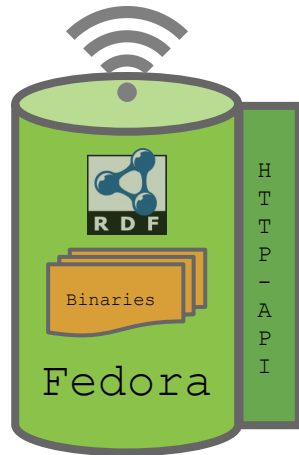
Component of Ecosystem



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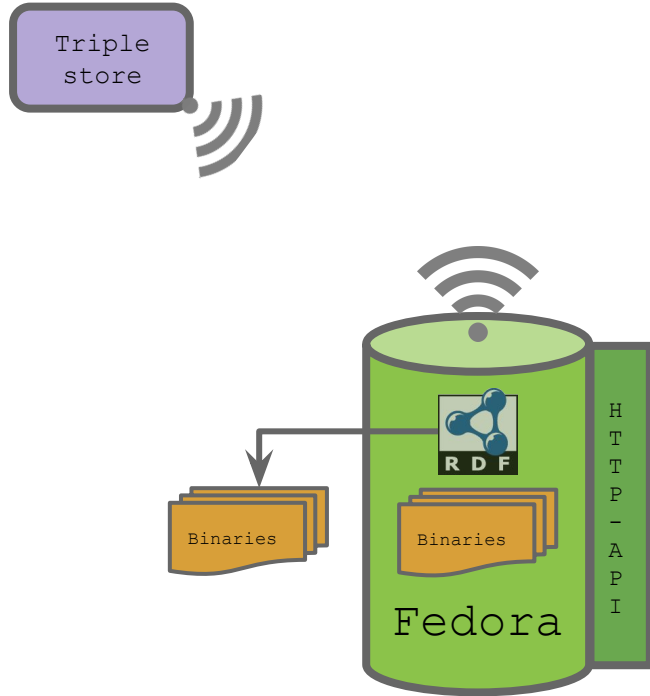
Component of Ecosystem

Triple
store



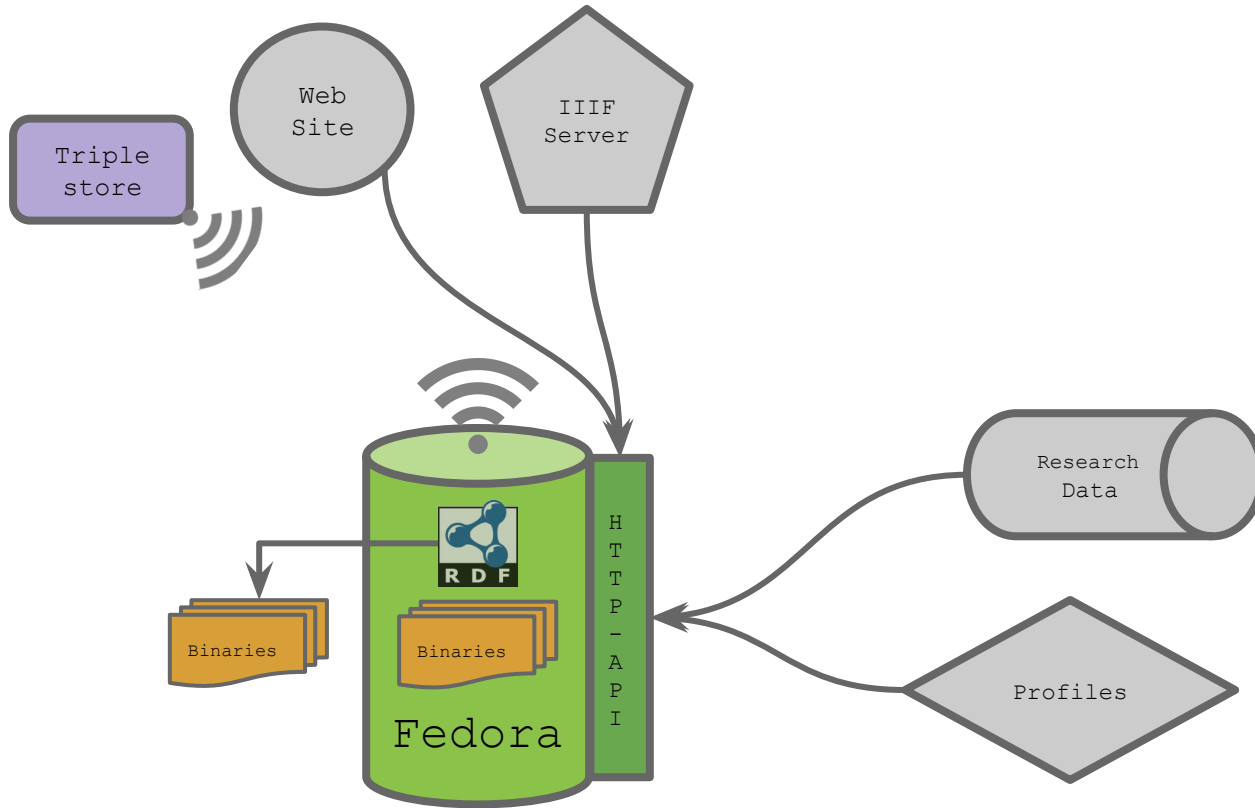
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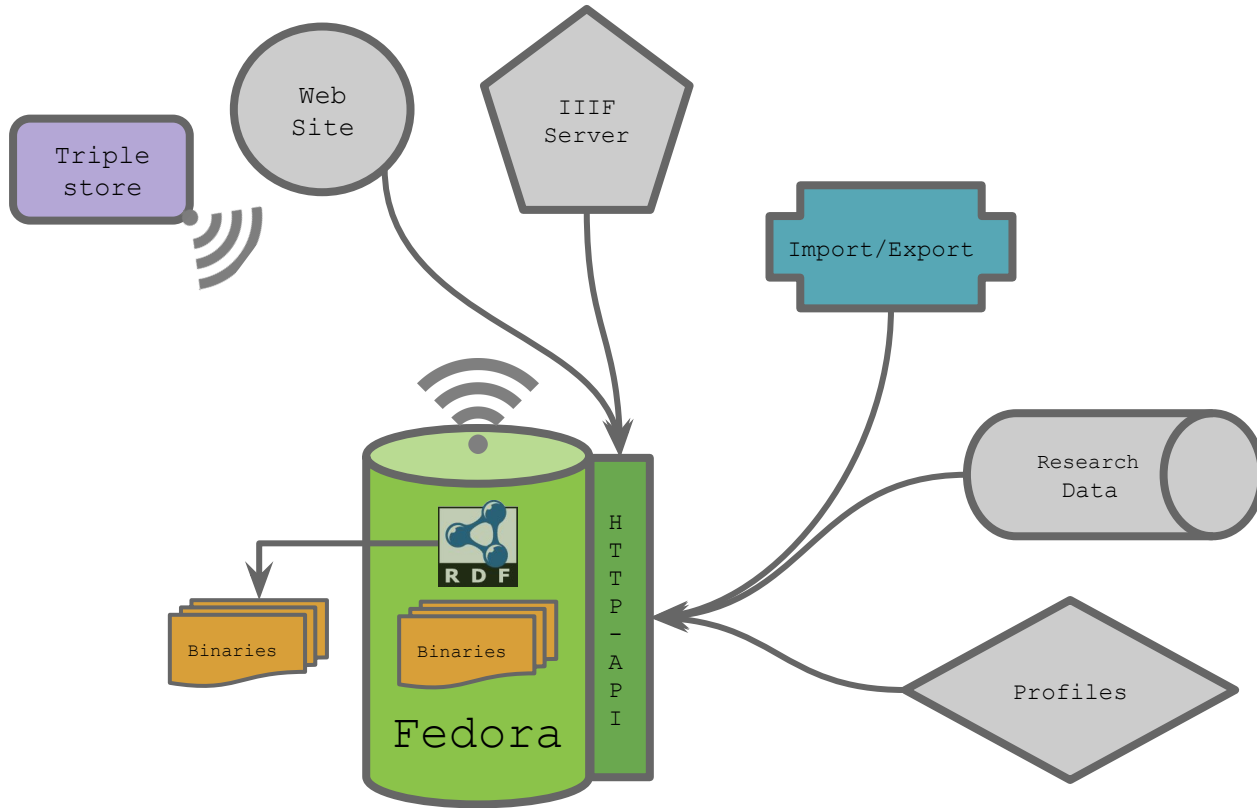
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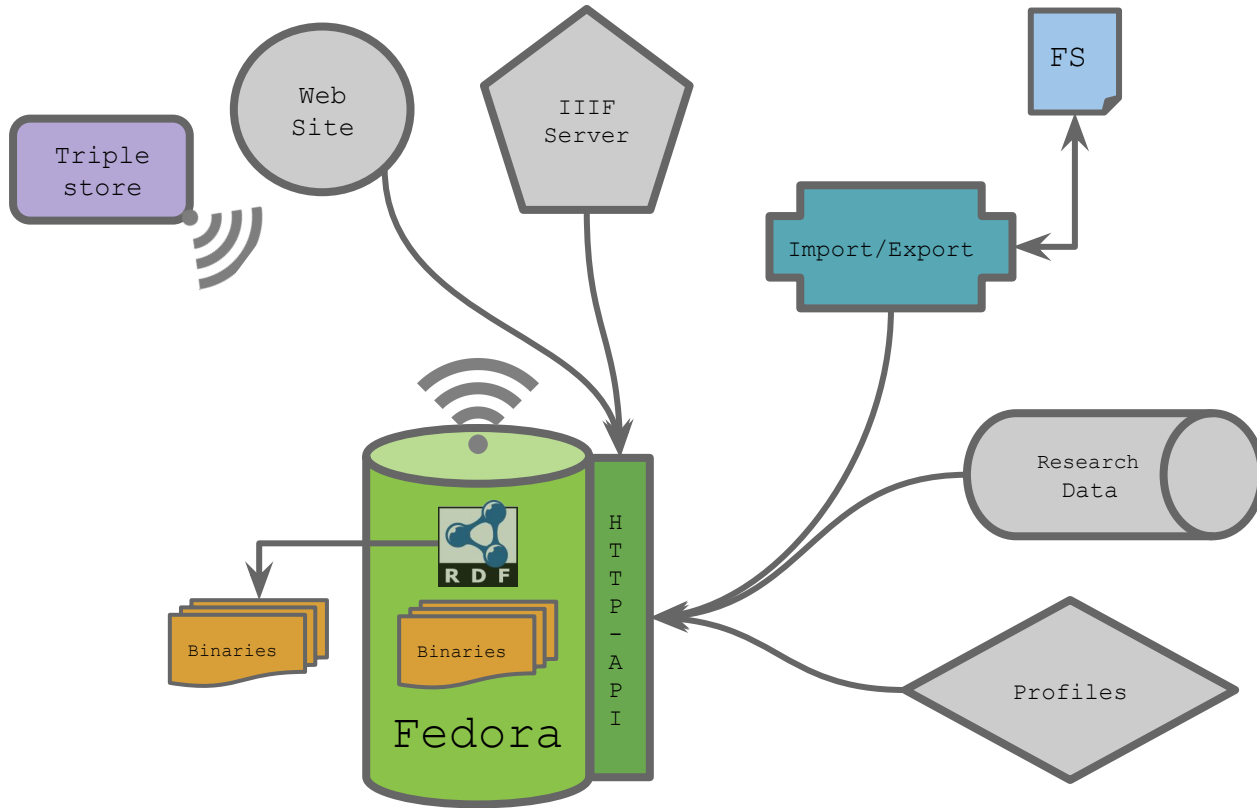
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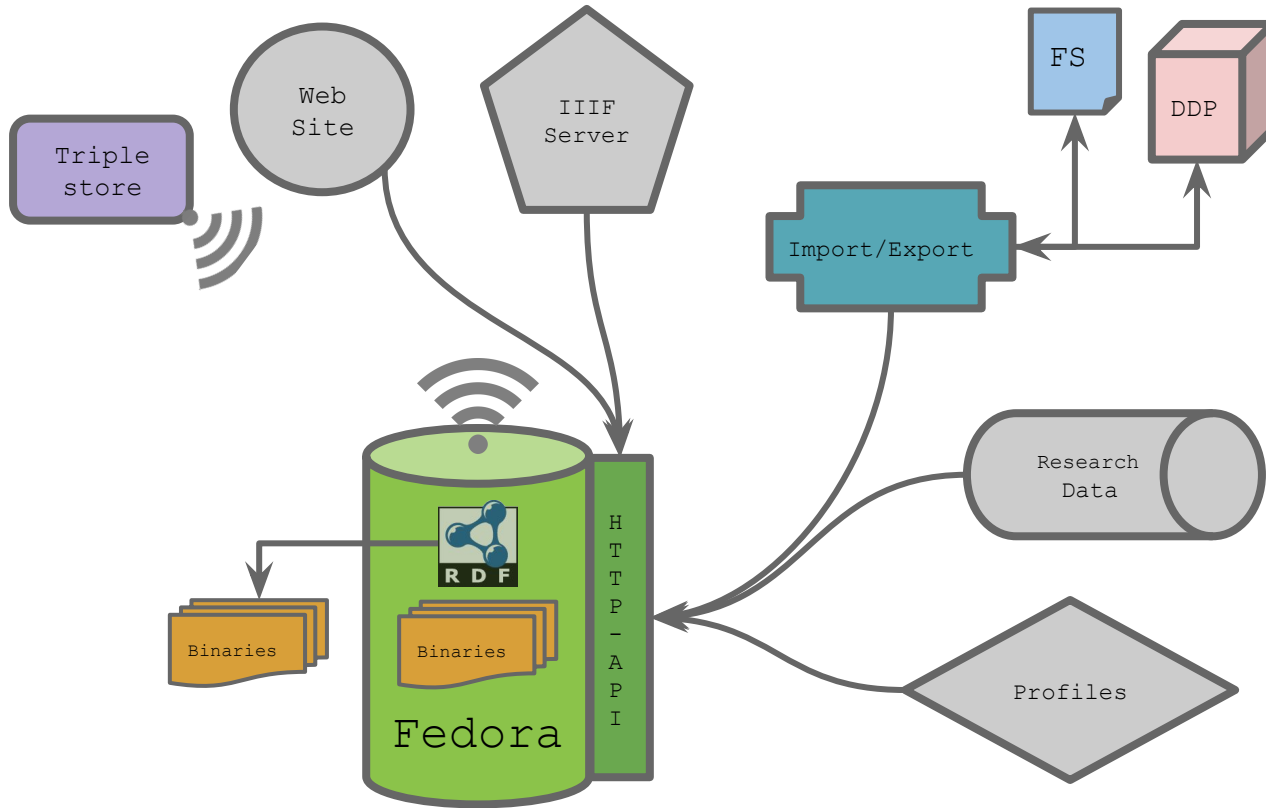
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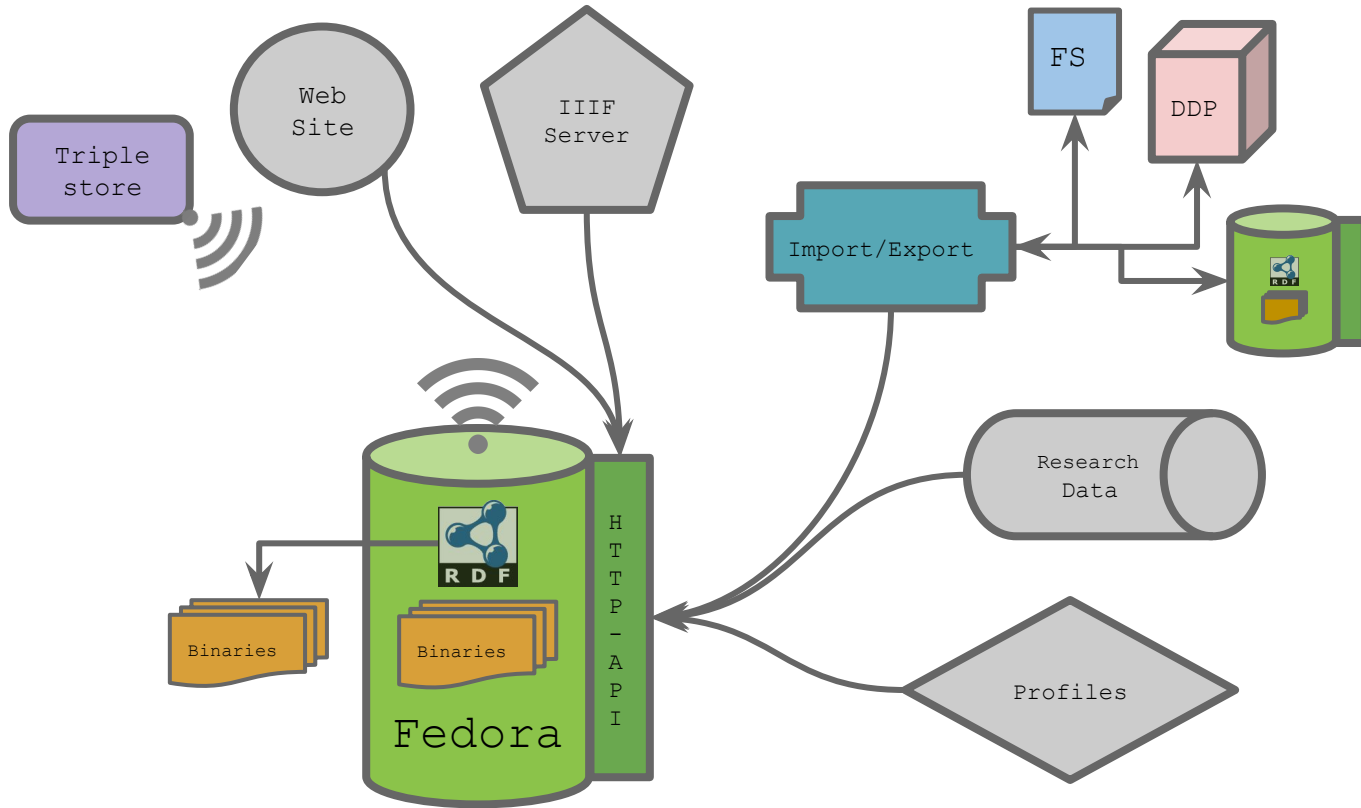
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The Year Ahead



Fedora **API Specification**

<http://fedora.info/spec/>

- ▶ Resource Management (Linked Data Platform)
- ▶ Resource Versioning (Memento)
- ▶ Resource Authorization (Web Access Control)
- ▶ Notifications (Activity Streams)
- ▶ Binary Resource Fixity (HTTP headers)

Fedora API Specification **Editors**

- Ben Armintor (Columbia U)
- Esmé Cowles (Princeton U)
- Danny Lamb (Islandora Foundation)
- Simeon Warner (Cornell U)
- Andrew Woods (DuraSpace)

Fedora API Specification - **Timeline**

- ▶ Initial Public Working Draft
 - ▷ Complete
- ▶ Candidate Recommendation
 - ▷ Released Nov 2017
- ▶ Recommendation

Specification Release **Requirements**

- ▶ At least two implementations
 - ▷ Ideally, three or more
- ▶ At least two client frameworks
- ▶ Test compatibility suite
- ▶ No critical, unresolved discussions

Let a thousand flowers bloom



Source: Andrew Woods,
Summit County, Colorado

Community **Initiatives**

- ▶ **API Extension Framework (API-X)**
- ▶ **Import / Export Utility**
 - ▶ Moving data through time
 - ▶ Transparent formats
 - ▶ Easy in -- Easy out
- ▶ **Oxford Common Filesystem Layout**

Semantic Versioning

Example: **8.1.3**

Given a version number **MAJOR.MINOR.PATCH**, increment the:

1. **MAJOR** version = incompatible API changes
2. **MINOR** version = new, backwards-compatible features
3. **PATCH** version = backwards-compatible bug fixes

<http://semver.org/>

Fedora 4: The **Branding Dilemma**

4.6.0 - Aug 2016 (features & API updates)

4.6.1 - Nov 2016 (bugfix)

4.6.2 - Mar 2017 (security patch)

4.7.0 - Nov 2016 (features & storage upgrade)

4.7.1 - Jan 2017 (features)

4.7.2 - Mar 2017 (security patch)

4.7.3 - Jun 2017 (bugfix)

4.7.4 - Aug 2017 (features)

Release **Policy**

1. No more than one **MAJOR** per year
2. **MINOR** and **PATCH** as needed
3. Backport security and critical bugfixes:
 - ▷ previous **MAJOR***

In **Summary**

- ▶ API Specification
 - ▷ Emergent implementations
 - ▷ Limit major releases
- ▶ Ecosystem interoperability
- ▶ Preservation-centric persistence

The Value of **Community**

- ▶ Software is difficult to support and maintain
- ▶ Even large institutions can't go it alone
- ▶ No single point of failure or control

Fedora is supported by a distributed, global community of stakeholders and contributors



How to Get **Involved**

Fedora website

<http://fedorarepository.org/>

Mailing lists

<https://wiki.duraspace.org/display/FF/Mailing+Lists+etc>



THANKS!

Any questions?

You can find me at [@d_wilcox](#) & dwilcox@duraspace.org



Credits

Presentation template by [SlidesCarnival](#)