ECF 3.3/Helios

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Home Page: http://www.eclipse.org/ecf

Wiki: http://wiki.eclipse.org/ECF

Project Plan: http://www.eclipse.org/projects/project-plan.php?projectid=rt.ecf

Highlights

- ## OSGi 4.2 Remote Services Standard Implementation

  - ECF 3.2 provides ull impl of OSGi 4.2 remote services standard

  - Multi-provider impl of discovery and distribution for standards-based remote services

    - Providers

      - Discovery: Zeroconf, Slp, Apache Zookeeper, XML File
      - Distribution: ECF generic, r-OSGi, JMS, XMPP, REST, SOAP, JavaGroups

- ## Asynchronous Remote Services

  - OSGi standard only specifies synchronous invocation of remote services

  - ECF impl of OSGi remote services exposes asynchronous API and impl

    - Callback-style
    - Future-style

  - API could be candidate for standardization. Work going on in OSGi EE right now.

Highlights

- ## Apache Zookeeper Discovery

  - Apache Zookeeper discovery popular/desired by community

  - ECF provider architecture allows pluggable discovery

  - Apache Zookeeper-based discovery provider contributed by Remain Software

- ## Distributed Event Admin Message Bus

  - Distributed impl of OSGi Event Admin service for publish and subscribe messaging with standard API (EventAdmin)

  - Allows transport-independent interprocess messaging using standardized EventAdmin API

- ## OSGi Remote Services in SOA Package

  - OSGi 4.2 Remote Services standard only OSGi SOA standard

  - ECF Impl of OSGi Remote Services added to SOA Package

Highlights

- ## REST and SOAP-Based Remote Services
  - OSGI Remote Services clients based upon REST and SOAP services
  - ECF provider architecture allows pluggable distribution
  - REST-style and SOAP-style remote services providers implemented

- ## ECF RS in SOA Package
  - OSGi 4.2 Remote Services is only OSGi SOA spec
  - ECF Remote Services Impl in SOA EPP

- ## Examples and Documentation
  - Hello world remote service
    - Discovery providers: zeroconf, slp, zookeeper, file
    - Ddistribution providers: r-OSGi, ECF generic, JMS
  - OSGi Remote Services Load Balancing
  - http://wiki.eclipse.org/ECF#OSGi_4.2_Remote_Services

- ## New RCP apps Based upon ECF
  - TweetHub
  - Salvo Newsreader (not in Helios/ECF 3.3, but preparing/finishing IP process)

Themes and Plan Items

- ## Remote Services

  - Full impl of OSGi 4.2 remote services standard

  - Discovery and distribution for standards-based remote services

  - Rest and SOAP-based support for clients

  - Interoperability with existing (non-OSGi-based) servers/services...i.e. OSGi remote service on client to access non-OSGi (REST, SOAP, and others) web services

  - Asynchronous Remote Services

    - No existing standard. ECF impl provides fully functional API and impl. API can/could be used for standardization.

- ## Examples and Docs

  - Full applications: Eclipse, RCP, OSGi Server

  - API usage (particularly Remote Services)

Deferred Plan Items

- Google Wave Provider

    - https://bugs.eclipse.org/bugs/show_bug.cgi?id=280347

    - Made progress on enhancement

    - Insufficient resources to complete, test, deploy in Helios cycle

Non Code Aspects

- ## Community Very Active
    - Many new large and small contributors
    - (Too) many requests for features, new providers, etc.
    - Mailing list: ecf-dev@eclipse.org, newsgroup: eclipse.technology.ecf
    - ECF Blog is very active: http://eclipseecf.blogspot.com
    - Wiki contributions growing. Wiki going to be 'crowdsource' focus for ECF book effort

- ## Internationalization, Localization, Accessibility
    - Meeting all Helios Requirements
    - As runtime project, ECF has minimal UI (modulo example apps)

Community and Contribution Growth

- Zookeeper Discovery Major Contribution from new corporate member (Remain)

- SOAP RS Examples Contribution (not in Helios, but in subsequent releases)

- Other contributions (e.g. ICQ provider...again not in Helios)

- Many more consumers (of Remote Services, REST, etc)

- New committers
  - Nuwan Sam – Specific Google Services for Gsoc 2009

Committer Diversity

- 10 part time active committers
- Committers from multiple companies
  - Remain Software
  - Others
- Committers from multiple countries
  - Brazil, US, Germany, Denmark, France

API

- ## In Active Use
  - P2/Platofrm: ECF filetransfer
  - OSGi REmote Services: Multiple community consumers
  - Commercial products/projects (e.g. Coffee)

- ## Documentation
  - Bundle-Level Documentation: http://wiki.eclipse.org/index.php/ECF_API_Docs
  - Javadocs: http://www.eclipse.org/ecf/org.eclipse.ecf.docs/api/
  - Eclipse help (extensions, javadocs, overview docs
  - Many more examples for remote services (hello world, remote services loadbalancing, etc): http://wiki.eclipse.org/ECF#OSGi_4.2_Remote_Services

Standards

- ## OSGi 4.2 Remote Services

    - ECF 3.2/3.3 implements full OSGi 4.2 Remote Services Specification (chapter 13 in compendium)

    - ECF's remote services implementation is transport and serialization-independent...meaning that new/other discovery and distribution providers may be easily introduced and be made immediately spec compliant. This can/could be consumed by other Eclipse RT projects to achieve spec compliance, as well as interoperability with other discovery and distribution mechanisms. e.g. Riena, Virgo, etc.

    - Asynchronous Remote Services

        - Fits within existing spec

        - Anticipates future spec (async remote services under discussion in EEG)

        - ECF design/implementation will hopefully influence EEG

    - Future/Indigo

        - Remote Services Admin (new spec addition after 4.2)

        - Asynchronous Remote Services (see above)

        - Changes/enhancements to Remote Services spec

Bugzilla

Severity		
	blocker	1
	critical	1
	major	7
	normal	82
	minor	2
	enhancement	11
	Total	104

IP Issues

- All significant and third party contributions have been reviewed and approved by Eclipse legal.

- About files and license files are complete and correct.

- ECF has several other pending/under review contributions, but these are **not** included in ECF 3.3

- Draft IP log:

  - http://www.eclipse.org/projects/ip_log.php?projectid=rt.ecf

ECF 3.4 Plans (Preliminary)

Remote Services Admin

GSoc 2010 Project Output Into ECF

- DNS-SD based wide-area ECF discovery provider (Markus Kuppe)
- Google Wave Provider (Sebastian Schmidt)
- Restlet API as Server-side remote service host

Google Wave Provider

DNS-SD based Discovery Provider

Other things under discussion