



GROUNDWORK

OPEN SOURCE



GroundWork Monitor Architecture Overview

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GroundWork Architecture – Introduction

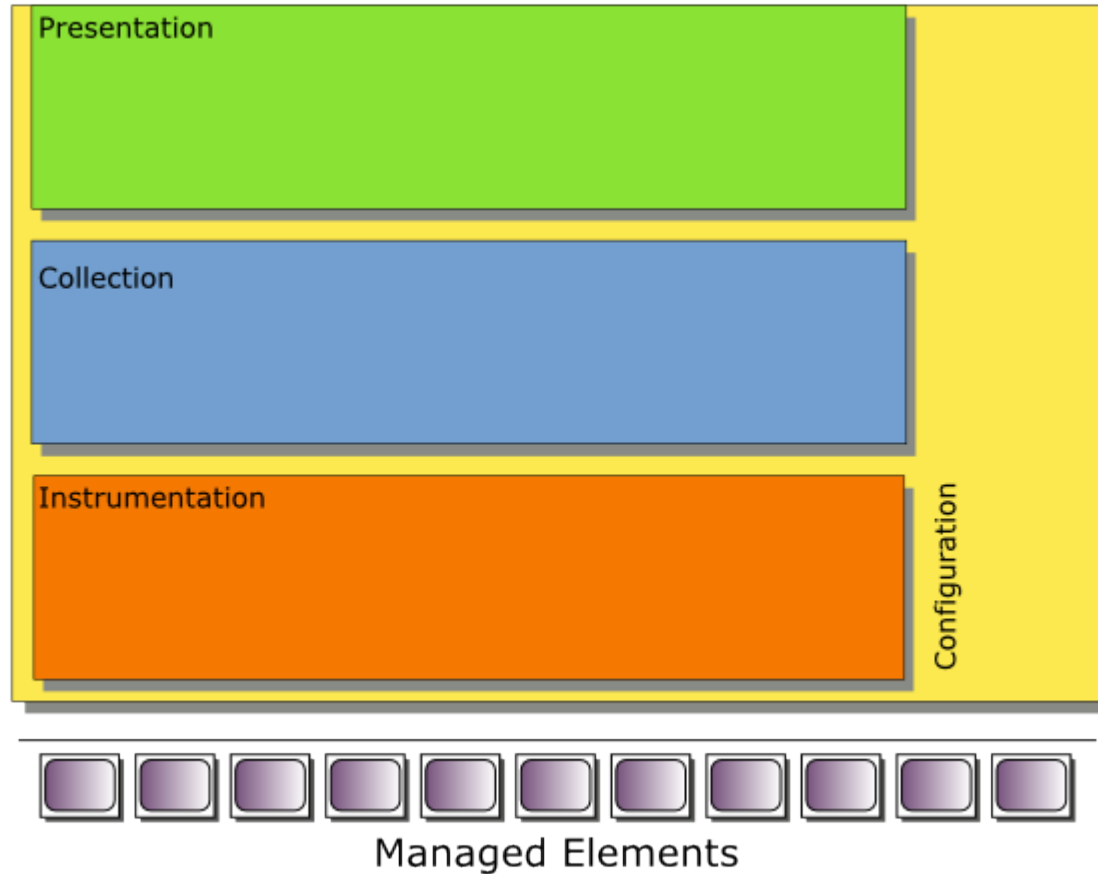
- **High-level Architecture**
 - Top-level
 - Instrumentation
 - Collection
 - Presentation
 - Configuration

- **Open Source Components**
 - Integrated Instrumentation
 - Contributed Projects
 - Platform Components

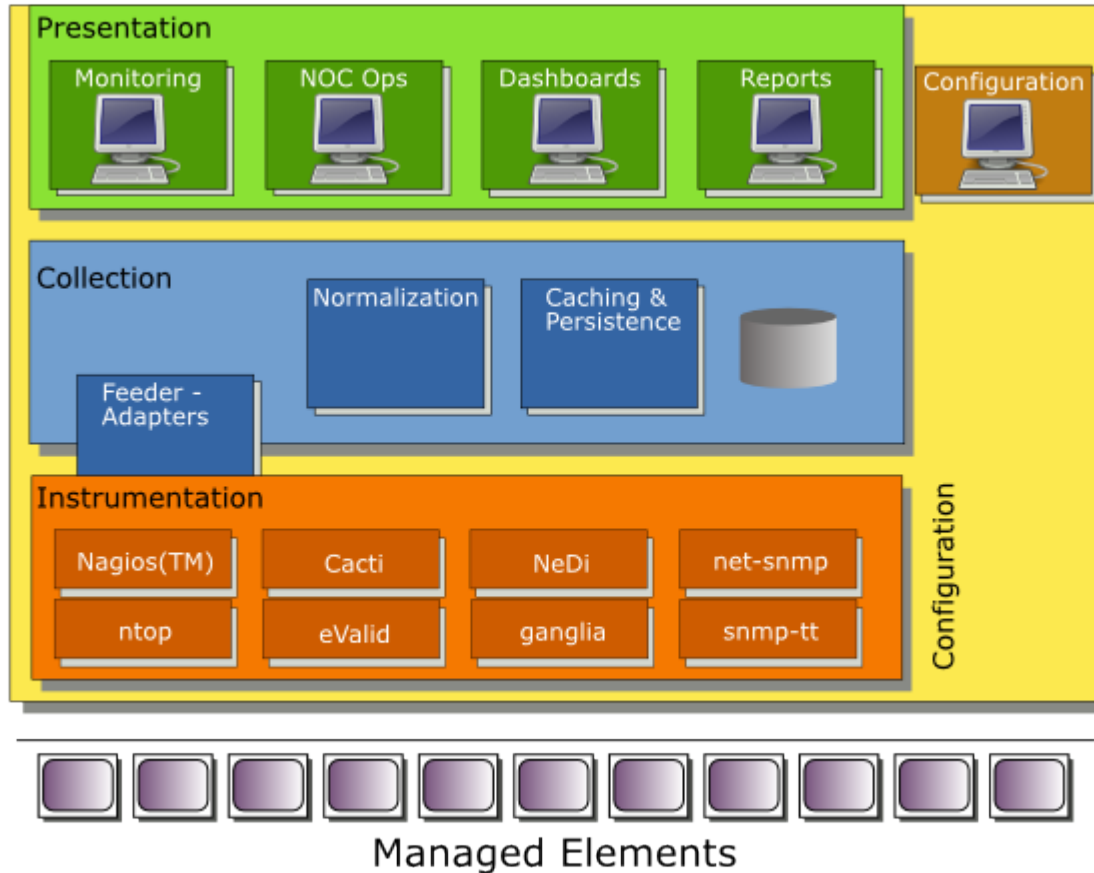
GroundWork Monitor Professional – Capabilities

- Comprehensive Monitoring
 - Cover Most Typical Environments Out of the Box
 - Multiple Monitoring Methods
 - Reduce False Alarms and Alarm Storms with Event Suppression
- Advanced Visibility and Control
 - Track and Manage Performance
 - Integrated Console
- Extensible Service Level Monitoring Framework
 - Create Robust Executive-Level Dashboards
 - Advanced Business Service Reporting
- Easily Installed and Configured
 - Install in Minutes; Configure in Days
 - Extensible and Adaptable to your Specific Needs
- Fully Documented, Supported, and Maintained
 - Starting at \$16,000 Annual Subscription

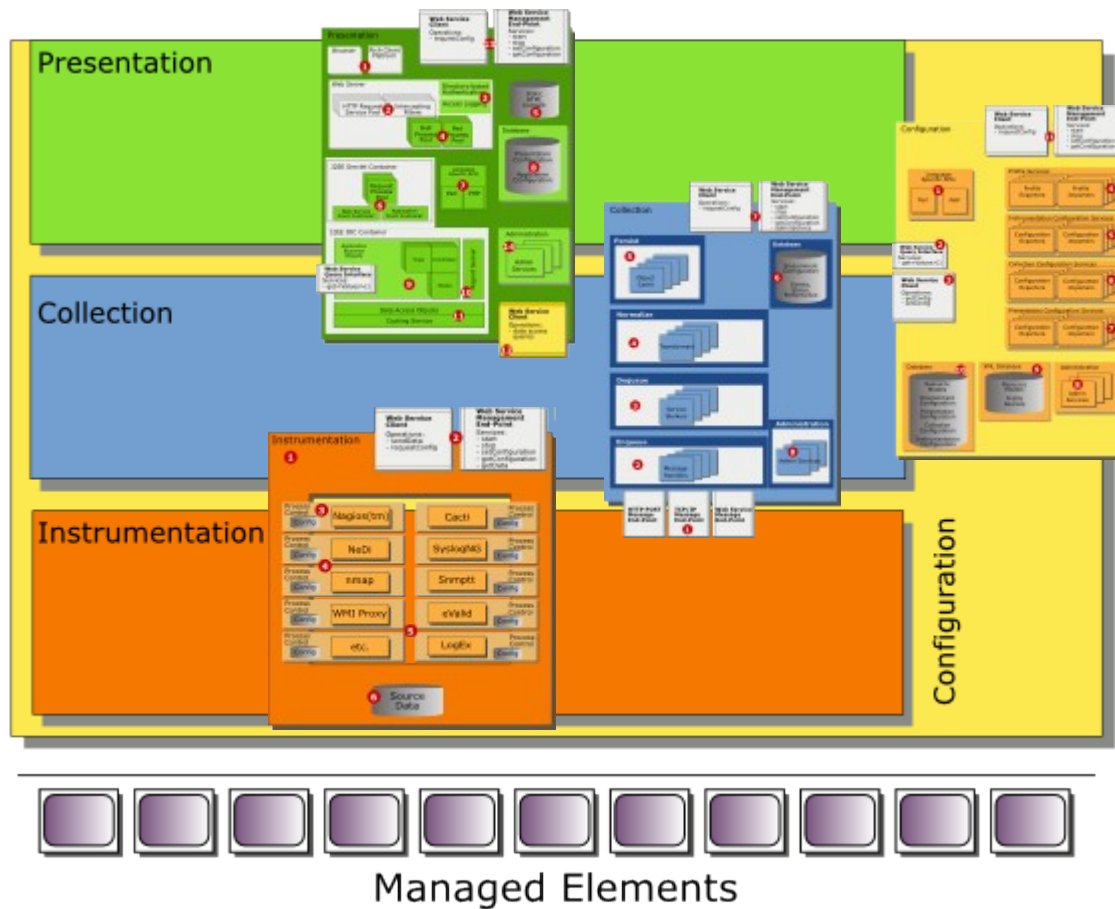
GroundWork Architecture – Overview



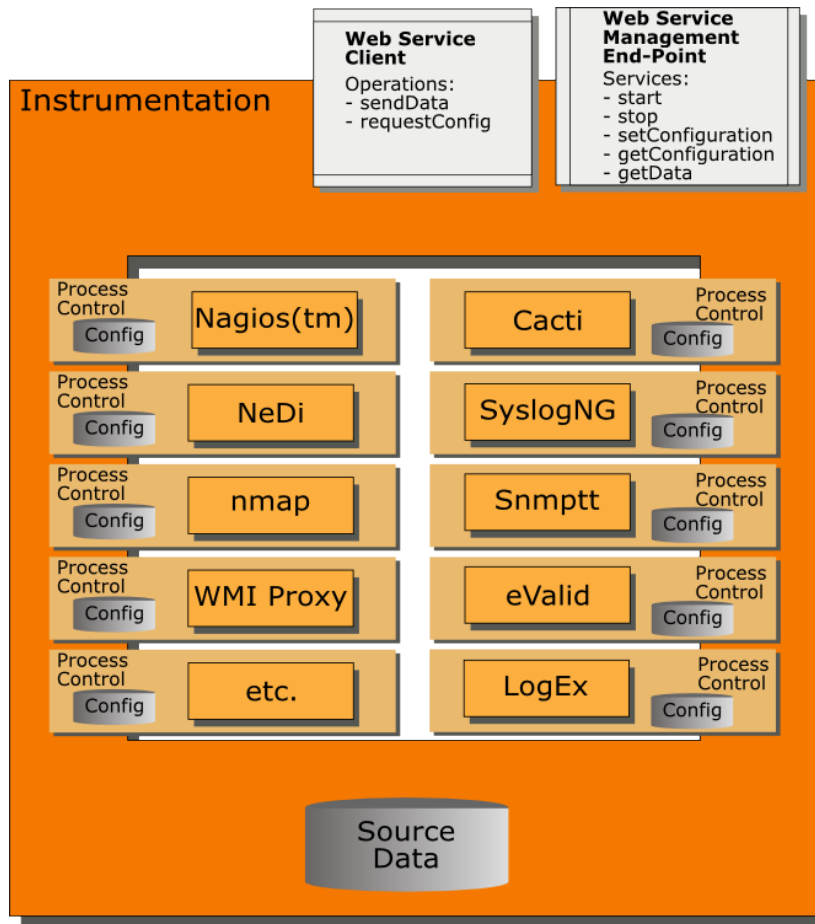
GroundWork Architecture – Overview



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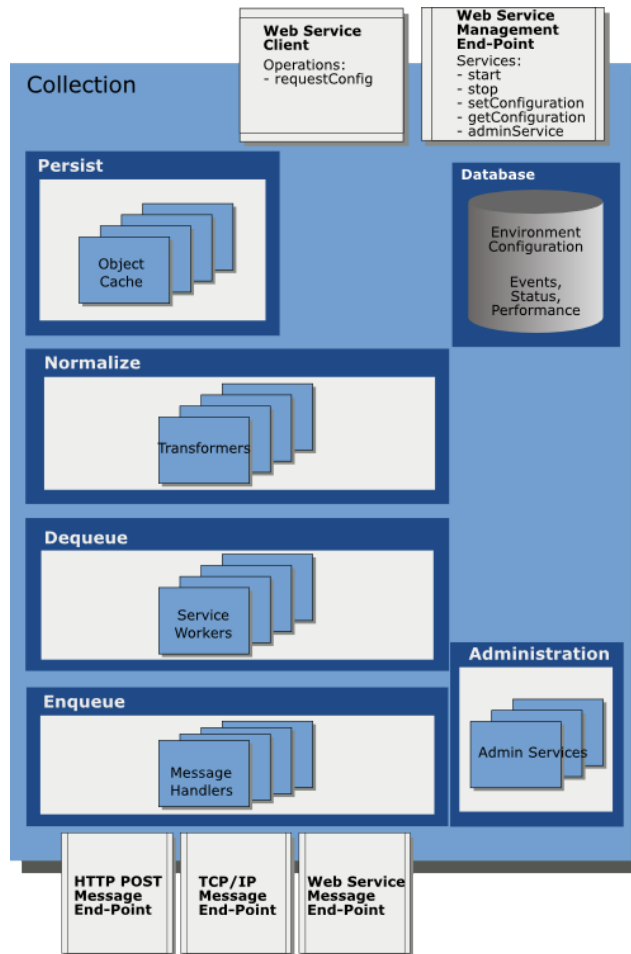


GroundWork Architecture – Instrumentation



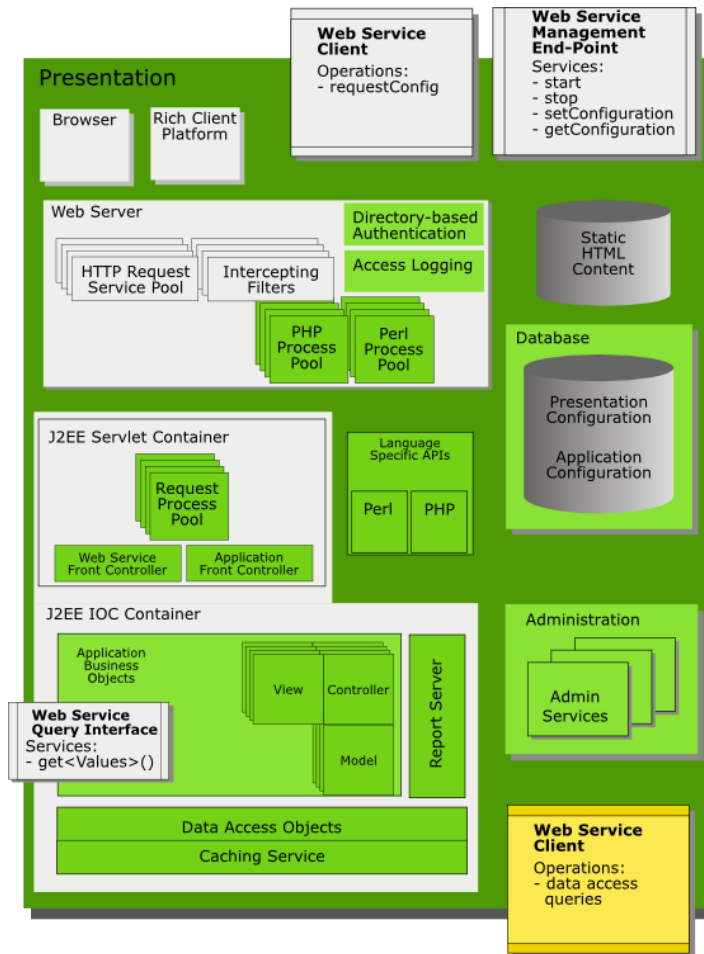
- Loosely coupled, highly cohesive
- Open Source projects are *not* modified
- Capabilities are *disciplined* to provide monitor information as data messages
- Allows for distributed configuration and scaling

GroundWork Architecture – Collection



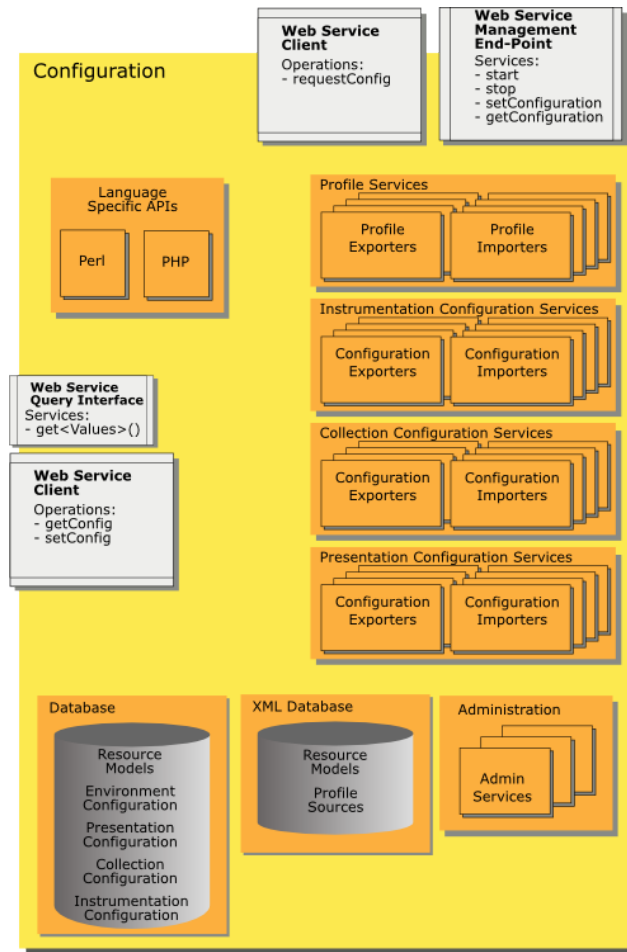
- Feeder-adapter pattern to perform message handling
- Parallelized for optimal throughput
- Caching for high-speed access
- Normalized view of data from disparate sources

GroundWork Architecture – Presentation



- Provides integrated user interface
- APIs for access to data: Perl, PHP, Java
- SOA for Web Services: queries, reporting
- User permissions and access controls
- Integrated Report Engine

GroundWork Architecture – Configuration



- **Best practices embodied as *Profiles***
- **Instrument configuration**
 - Nagios™
 - net-snmp, snmp-tt
 - Cacti
 - NeDi
 - ntop
 - Network Weathermap
- **Resource Database**
 - Systems, services, devices
 - Interdependencies

Open Source Components

■ Integrated Instruments

- Nagios™
- Cacti
- net-snmp
- snmp-tt
- ntop
- NeDi
- Network Weathermap
- nmap

■ Contributed Projects

- GroundWork Monitor Open Source
- GroundWork Foundation
- GroundWork Guava
- GroundWork Monitor Architect
- GroundWork Status Viewer
- GroundWork Fruity

■ Platform Components

BIRT	DBD-mysql	gawk
Jetty	DBI	gettext
Axis	Data-ShowTable	glib
Hibernate	Device-SerialPort	krb5
Spring	Digest-HMAC	libelf
Log4j	Digest-SHA1	libmcrypt
Joram	GDGraph	libmd
Ehcache	GDTextUtil	libradius-linux
c3p0	HTML-Parser	openldap
httpd	HTML-Tagset	openradius
mnogosearch	HTML-Tree	openssl
mod_auth_tkt	IO-Socket-SSL	pkgconfig
php	MailTools	postgresql
freetype	Net-Jabber	readline
gd	Net-SNMP	snmptt
gdbm	Net-XMPP	sysstat
jpegsrvc	Nmap-Scanner	tcl
libpng	Time-HiRes	
zlib	URI	
cgilib	XML-LibXML	
iputils	XML-LibXML-Common	
libart	XML-NamespaceSupport	
ntp	XML-Parser	
qstat	XML-SAX	
rrdtool	XML-Stream	
sendEmail	libwww-perl	
Authen-SASL	libxml	
CGI-Ajax	perl	
CGI	sendpage	
Class-Accessor	bison	
Compress-Zlib	db	
Config-IniFiles	findutils	
Crypt-CBC	flex	
Crypt-DES	freedt	

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