

# Release Notes 1.9.0

On this page:

## What's new in OpenMRS 1.9

**Release date:** 6 June 2012

Version 1.9.0 of OpenMRS has three (3) major changes. (A larger list can be found below.)

- Grouping encounters into visits
- Multiple providers per encounter
- Additional attributes to concept mapping

### 377 Bugs Fixed

 Unknown macro: 'composition-setup'

 Unknown macro: 'toggle-cloak'

[Click here to see all 377 bugs fixed in OpenMRS 1.9.](#)

 Unknown macro: 'cloak'

TRUNK-2390	Remove MigrationController
TRUNK-2620	TRUNK-1925 Id Generators for Hibernate Mapping require SEQUENCE name
TRUNK-2642	TRUNK-1925 Change Liquibase Schema to SQL Independent Types
TRUNK-2657	TRUNK-1925 ON UPDATE CASCADE in relationship table cannot be performed on SQL Server
TRUNK-2540	TRUNK-2539 Add missing version numbers to pom.xml
TRUNK-2542	TRUNK-2539 Warnings when running AttributeUtilTest
TRUNK-2631	TRUNK-1925 Allow IDENTITY_INSERT for SQL Server when making liquibase insert statements
TRUNK-2632	TRUNK-1925 Move Privileges and Roles to Core Data Liquibase XML
TRUNK-2633	TRUNK-1925 NEWSEQUENTIALID() can be only used in SQL Server DEFAULT expression for a column of type 'uniqueidentifier'
TRUNK-2667	TRUNK-1925 HibernateUtil should escape single quote character on all DBMS
TRUNK-2433	AdministrationService.saveGlobalProperties is dangerous, and should be changed
TRUNK-2465	Ordering of encounters on formentry tab incorrect
TRUNK-2729	Cannot save html form
TRUNK-2715	Cannot duplicate Basic Form
TRUNK-2712	Encounter form is broken
TRUNK-2764	Cannot view encounter
TRUNK-2647	In the Edit Visit page, startDatetime and stopDatetime need time pickers
TRUNK-2773	Editing encounters should not result into multiple openmrs headers

TRUNK-2782	Cannot save edited location
TRUNK-2006	Installation wizard should not automatically set connection.driver_class in the runtime properties file
TRUNK-1942	Unknown column error when a user enters multiple words in the concept search box
TRUNK-1958	In web layer, Spring CustomDateEditor initialization should be modified to better prevent against bad dates
TRUNK-2054	OpenMRS in-app Help is not helpful
TRUNK-2116	Address layout Portlet doesnot display locations
TRUNK-2117	Fix links above the banner
TRUNK-2225	headerMinimal does not include dwr js variable
TRUNK-2324	URL patterns for module servlet filter mappings should be relative to the context path
TRUNK-2298	Add includedVoided argument to EncounterService.getEncountersByVisit
TRUNK-2348	InvalidPropertyException: Invalid property 'xslt' of bean class org.openmrs.Form
TRUNK-2428	ConcurrentModificationException in ConceptNameSaveHandler
TRUNK-2432	ValidateUtil does not validate Concept
TRUNK-2675	View Concept page checks for an invalid privilege to display edit link
TRUNK-2702	The new search widgets spinner runs forever when input box gets cleared
TRUNK-2775	Should not create new runtime properties file if one was found
TRUNK-255	Change default logging levels of service methods.
TRUNK-203	Deleting Patients is possible without proper permissions
TRUNK-226	Voiding a patient should void patient's related data
TRUNK-292	Core should allow formentry modules to store view and resource metadata for a form
TRUNK-259	HL7 privileges should also be included under the Role Management screen
TRUNK-308	Concept Dictionary not saving properly
TRUNK-21	Changing workflow states on dashboard fails silently if date is blank or before date of start of current state
TRUNK-286	Add startDate and stopDate to Relationships
TRUNK-403	OrderService.getOrders does not correctly use ORDER_STATUS
TRUNK-275	Refactor standard drug regimens
TRUNK-219	changing task's schedule should reschedule the task
TRUNK-1627	Remove obs.dateStarted and obs.dateStopped
TRUNK-1687	Fix installer target in build.xml
TRUNK-1690	Add coding conventions to maven

TRUNK-1809	Module is not unloaded completely when dependent module is reloaded
TRUNK-1840	initialsetup: OpenMRS logo text is not correct
TRUNK-1874	CSRF Attack error occur during patient search with Tomcat 7
TRUNK-1938	The Civil Status field on the short patient form doesn't display or set the value
TRUNK-1963	Autocomplete option isn't chosen automatically unless clicked
TRUNK-1959	Hidden Identifier Fields When Creating a New Patient
TRUNK-1994	JUnit tests fail if run independent of maven
TRUNK-2011	Control character in cookie value, consider BASE64 encoding your value
TRUNK-2000	Admin page disappears if a bad module is uploaded
TRUNK-2108	User management page fails on searching with role and include disabled users
TRUNK-2026	save* and create* Before Advisor throws ClassCastException
TRUNK-2473	Javascript error on left and right arrow keys when creating new concept
TRUNK-2063	Fix fragile date comparison in ShortPatientFormValidatorTest
TRUNK-2129	When saving voided Person PersonSaveHandler should make sure the personVoidReason field is not empty, <b>not</b> the (patient) voidReason
TRUNK-2130	Add admin page for mapping concept reference terms and add a search widget
TRUNK-2132	Manage Observations privilege is missing from OpenMRS 1.6 Core Privileges
TRUNK-2323	Fix the logic in EventListeners.setGlobalPropertyListeners
TRUNK-2339	Tooltip on "Search Terms" on edit concept form is bad
TRUNK-2344	Upgrade Spring framework to latest stable release or atleast 3.0.3
TRUNK-2363	when try to add visit, it give me an error (tomcat-specific)
TRUNK-2392	ConceptService.getDrugs(String phrase) does not include retired results, but it should
TRUNK-2435	PatientSearch objects with filterClass belonging to a module aren't always properly decoded
TRUNK-2422	Look for runtime properties in current directory, environment variable, then home directory
TRUNK-2424	Unable to Save New Concept when OpenMRS is run in a JVM in Indonesia/French Locale
TRUNK-2446	Move Encounter types from core data to demo data
TRUNK-2459	getHydratedObject giving errors for person attributes that are char,int, and float options when put itrying to create a new Patient
TRUNK-2460	getHydratedObject giving class not found for person attributes that are org.openmrs.Patient.exitReason and org.openmrs.DrugOrder.discontinuedReason
TRUNK-2469	Conflicting ASM Library
TRUNK-2500	Synchronized Block in ModuleClassLoader Causing Dead Locks
TRUNK-2515	PersonService should extend OpenmrsService

TRUNK-2507	Tags use arbitrary build number
TRUNK-2508	Dojo references in openmrs.js cause javascript errors
TRUNK-2516	Add unique constraint to concept_source.hl7_code column
TRUNK-2521	Multiple Program Workflow States with same start date
TRUNK-2523	javascript error when trying to edit an existing program enrollment
TRUNK-2524	When you try to save changes to a program enrollment, they are saved, but the page appears stuck
TRUNK-2629	Voiding/unvoiding Person, Patient and User needs to be fixed
TRUNK-2673	ServiceContext.getRegisteredComponents has an unprotected log.debug
TRUNK-2713	Database with no demo data makes the first form readonly
TRUNK-2584	Fix purgeConcept and deleteConceptWord methods in HibernateConceptDao
TRUNK-285	Concept.getAnswers should include retired answers by default
TRUNK-2730	getConceptsByClass is broken
TRUNK-2561	Secret Question screen expects User to have a Person
TRUNK-2777	Database setup wizard should preserve contents of existing runtime properties file
TRUNK-2811	HL7 processor should not lose unbounded coded concepts answers in submitted forms
TRUNK-2816	Include Retired and Show Verbose labels should come after their checkboxes
TRUNK-12	Fix @Should tags in Generated Javadoc
TRUNK-32	ORUR01Handler.getLocation should accept name instead of just locationId
TRUNK-231	HibernateContextDAO.openSession/closeSession
TRUNK-221	Inconsistency between Encounter & Form Entry tabs on Patient Dashboard
TRUNK-224	Error when creating Patient Identifier with duplicate value
TRUNK-338	Validate patient name in create form with regular expression property
TRUNK-437	Add Required Class Element to Extension Points
TRUNK-220	When stopping/starting a module, its services are not added properly.
TRUNK-232	Module service onStartup and onShutdown methods never get called
TRUNK-235	User preferences for "show retired" and "include definitions" not being used to automatically check boxes
TRUNK-1611	Obs should not be allowed to have null values for all value fields (unless the obs has child obs)
TRUNK-1693	Drug Regimen portlet is slow to load
TRUNK-1803	Max size of serialized_object entry
TRUNK-1834	Cannot unretire a person attribute type

TRUNK-1848	Role.getName() does not work as you'd expect
TRUNK-1852	Install from Module Repository feature does not work under maven+jetty
TRUNK-1870	Exit Patient From Care does not work in vanilla installation
TRUNK-1883	the Obs method getValueAsString(Locale locale) needs improvement
TRUNK-2033	java.lang.ClassCastException: org.openmrs.Person cannot be cast to org.openmrs.Patient
TRUNK-2046	Error message produced when problem arises exiting a patient from care is not very helpful
TRUNK-2670	Encounter field tag should not display 'null' string for encounters with null location
TRUNK-2352	retiredReasonRow is null javascript error on concept drug form
TRUNK-2047	Fix issues with StartModule and context refresh
TRUNK-296	Openmrs constant PRIV_PURGE_PATIENT_PROGRAMS is set to Add Patient Programs
TRUNK-431	"Data Entry Statistics" visible to all users under Administration
TRUNK-31	IE Error: Can't move focus to the control
TRUNK-276	personField.tag breaks if pageContext contains a 'roles' variable
TRUNK-223	Viewing a concept as Anonymous user fails with Privilege required: View Forms
TRUNK-1620	Updated OpenMRS logo and colors in logo are not correct
TRUNK-1668	Module engine will execute sqldiff based on the String ordering
TRUNK-2005	Handle HttpSessionRequiredException in spring annotated controllers
TRUNK-1864	Make Concept required on concept drug form
TRUNK-1936	Please add more detail to Person::getPersonName() behavior
TRUNK-1946	Calling User.addName throws a NullPointerException if the user isn't attached to a Person yet
TRUNK-2020	NullPointerException when getting a concept name
TRUNK-2024	Relationship view portlet looks unlike Programs, Allergies and Problem List
TRUNK-2051	Chrome shows horizontal scrollbar on every page
TRUNK-2056	Add error message in ADTA28Handler if AssigningAuthority is missing
TRUNK-2199	Implement API method for retrieving PersonNames by PersonNameId
TRUNK-2430	User bar remains at top of screen and overlays content when scrolling on any page
TRUNK-2495	OpenmrsConstants.OPENMRS_VERSION is null when run with mvn jetty:run
TRUNK-2512	Default Cursor Placement on the Manage Users Screen
TRUNK-2568	You shouldn't be allowed to add an encounter to a visit if the encounter's datetime is not within the date range of the visit
TRUNK-335	Various problems with Dashboard Graphs

TRUNK-265	Complex obs images of type other than jpg aren't displayed right in the edit obs page
TRUNK-1638	When a concept is retired through the web interface, retired_by, date_retired and retire_reason are NULL in database concept table
TRUNK-1853	concept_answer.answer_drug does not have a foreign key to the drug table
TRUNK-1871	PatientServiceImpl.saveReasonForExit needs to provide a change message when updating the reason for exit obs
TRUNK-1989	Faulty ConceptNameTag.equals method
TRUNK-1912	Patient filter incompatibilities between OpenMRS 1.5 and 1.6
TRUNK-1923	PatientServiceImpl.saveCauseOfDeathObs needs to provide a change message when updating the cause of death obs
TRUNK-2018	Fix Initialization wizard redirects in case of ajax timeouts
TRUNK-1986	DataIntegrityViolationException when trying to delete a patient
TRUNK-1939	Default Cursor Placement on Find/Create Patient Screen
TRUNK-1971	Update pom to specify encoding for all plugins
TRUNK-1975	BinaryDataHandler leaves input stream open
TRUNK-1982	Update buildnumber Maven plugin in pom to non-modified released version
TRUNK-2001	Liquibase changeset preConditions missing "onFail" attribute
TRUNK-2043	Maven tests depend on machine locale
TRUNK-2066	Clean up favicon
TRUNK-2128	Retired locations should appear at the bottom of choice lists on the "Edit Patient" page
TRUNK-2156	Module tag files are copied into working copy of trunk when using jetty
TRUNK-2317	Logging Advice logs entire text of what is deserialized by serialization service
TRUNK-2293	Add All PropertyEditors to the global OpenmrsBindingInitializer
TRUNK-2313	nicer error handling when Patient Identifier Type regex too long
TRUNK-2315	search terms do not appear when viewing concept
TRUNK-2335	Javascript calendar picker not working on quick reports page
TRUNK-2353	Null pointer exception is occasionally thrown on concept drug form
TRUNK-2419	Default Button in Initialization Wizard is "Back" (again)
TRUNK-2458	Stop multiple users from running the installation wizard
TRUNK-2510	Pretty Error Message for: Patient is missing the following required identifier(s): HAS Dossier Number
TRUNK-2637	Source code rendering failed
TRUNK-2662	Logging level Global Property not used
TRUNK-1987	Make error more descriptive: ModuleException: A servlet mapping with name complexObsServlet already exists.

TRUNK-1985	DataIntegrityViolationException exception when trying to delete a form
TRUNK-2666	Table concept_map_type should have is_hidden column instead of isHidden
TRUNK-2795	InvalidPropertyException 'activeAttributes' when saving a visit
TRUNK-2913	Simplify display of visit on Visits tab
TRUNK-1637	Clarify what the startup error "Waiting for changelog lock...." means
TRUNK-2961	Saving user options for the default super user should not throw error message on second and subsequent times
TRUNK-2917	AuditableInterceptor throws an NPE at startup, preventing OpenMRS from running
TRUNK-2792	Starting a task whose class cannot be found should display a user friendly error message
TRUNK-2785	Saving person attribute type with missing description should give a user friendly error message
TRUNK-2783	Limit of maximum encounters to show on patient dashboard should be optional and configurable
TRUNK-2786	Saving relationship type with missing description should give a user friendly error message
TRUNK-2503	Include inherited roles when searching for users
TRUNK-412	Additional Attributes on Concept Mapping
TRUNK-2686	Provider Identifiers should be unique
TRUNK-2956	Search widget row highlight fails on verbose row when home/end/pageup/pagedown keys are used
TRUNK-2664	Change the priority when setting a preferred name for a concept
TRUNK-2791	Pressing start, stop, delete button without selecting any task should tell the user to first select at least one task
TRUNK-2023	Allow second user to see progress of update wizard
TRUNK-2586	Include a mock library in the core
TRUNK-2855	ERROR - RequestContextAwareTag.doStartTag(82) Theme 'theme': No message found under code 'jqueryui.theme.name' for locale 'en_US'
TRUNK-2922	Daemon user has no associated person
TRUNK-2948	1.9 Demo dataset sql file with the 5k patients needs a few more pieces of data
TRUNK-2055	Localize messages in the initialization and update wizard
TRUNK-2954	Rename visit configuration URL, jsp, controller and related files
TRUNK-2928	fix breaking test ConceptServiceImplTest.saveConcept_shouldSetDefaultPreferredNameToASynonymThird
TRUNK-2926	Add changeset to delete incorrect entries in role_role table
TRUNK-2914	Incorrect error message when trying to create an encounter and put it in a visit with incompatible start/end date
TRUNK-2796	Cannot save new visit and encounters at the same time
TRUNK-2909	1.9 Demo dataset needs a few more pieces of data
TRUNK-2923	Fix concept reference term to use random generated UUIDs

TRUNK-2821	Merge Patients page should be displayed on a separate pop-up screen
TRUNK-422	Edit / View of previous forms should merge into a single interface paradigm
TRUNK-2915	Manage Encounter should show date+time widget for encounterDatetime
TRUNK-2921	ConceptValidator should not compare names of a retired concept against the names of other concepts
TRUNK-2910	Add/Edit visit page needs to look like other OpenMRS pages
TRUNK-2152	Add upgrade script to set a preferred identifier for patients without one
TRUNK-2639	Drugs are not showing up in the concept search in the concept dictionary
TRUNK-2911	When you create a visit, it should take you back to the patient dashboard
TRUNK-2907	HibernateEnumType not finding module methods
TRUNK-2680	Automatically convert empty string properties on OpenmrsObjects to null before persisting in the database
TRUNK-2887	Add a label for encounters not assigned to any visit on the visit tab on the patient dashboard
TRUNK-2901	Obs.newInstance() method should include both voided and non-voided group member obs
TRUNK-2332	Fix EncounterService.getCountOfEncounters() and getEncounters(String, Integer, Integer, Boolean)
TRUNK-2900	Cannot parse address layout (fresh installation)
TRUNK-2644	Convert Global Property column to varchar
TRUNK-1677	Concept Proposal Management- Synonym function failed
TRUNK-2711	TRUNK-2696 Change active visits in header
TRUNK-2784	Add Encounter for Visit Extension
TRUNK-2889	Autocomplete widgets should not lose initial value on losing focus
TRUNK-222	Unable to find patients if their name is less than 3 characters
TRUNK-1993	UUID used by equals and hashCode in OpenmrsObject
TRUNK-2623	Concept::getAnswers(true) (for include retired ) should behave identically to Concept::getAnswers()
TRUNK-256	Preferred Patient Identifier should be required
TRUNK-2870	Field widgets that use autocomplete should show a visual indication of invalid entry
TRUNK-2793	Creating location tag without a name should display error message adjacent to the empty name textbox
TRUNK-2318	Do not allow creating, modifying, or deleting ConceptDatatype from the API
TRUNK-363	The web interface needs to support time obs when adding a new observation
TRUNK-2787	Cannot unretire relationship type
TRUNK-2766	Cannot upgrade from 1.8 to 1.9
TRUNK-2810	Adding ConvSet form field having a member concept without a description should not throw a NullPointerException

TRUNK-2814	Encounters should not be assigned to visits which stopped before the encounter date
TRUNK-2807	Unbounded coded concepts should not throw a NullPointerException when trying to answer them
TRUNK-299	WebModuleUtil should handle DWR <init> tags in dwr section of config.xml
TRUNK-420	Add obs.previous_version column
TRUNK-2780	Advanced setup install method should use default values in existing runtime properties file
TRUNK-2842	Fix spelling of Identifier Location on Add new Patient / Short Form
TRUNK-2849	Aware of module feature causes OpenMRS to crash
TRUNK-1668	Module engine will execute sqldiff based on the String ordering
TRUNK-2428	ConcurrentModificationException in ConceptNameSaveHandler
TRUNK-2697	Fix concept validator to allow duplicate concept names that are voided
TRUNK-2799	Missing description when saving program should give user friendly error message
TRUNK-3128	1.9 needs to require logic 0.5.2 as a core module, and bundle it
TRUNK-3031	Liquibase changeset 20100426-1947 fails when upgrading from 1.6
TRUNK-2703	Can't create relationship from patient dashboard
TRUNK-2700	m2eclipse error: Plugin execution not covered by lifecycle configuration
TRUNK-3108	ORUR01 handler should find providers by personId, providerId, identifier and uuid
TRUNK-2704	Can't create relationships from new patient page
TRUNK-2998	Fonts on the OpenMRS Installation Wizard not consistent...
TRUNK-3115	Rename AdministrationService.validateInManualFlushMode, and refactor it and ValidateUtil
TRUNK-2697	Fix concept validator to allow duplicate concept names that are voided
TRUNK-259	HL7 privileges should also be included under the Role Management screen
TRUNK-2011	Control character in cookie value, consider BASE64 encoding your value
TRUNK-3005	ConceptValidator finds duplicate names only for the current system locale
TRUNK-251	Add delete (and retire?) for program states in the workflow
TRUNK-3059	Encounter.removeProvider and setProvider should void the EncounterProvider, not remove it
TRUNK-198	Small fixes for newpatient.form
TRUNK-1800	Locale does not work property when using "Become This User"
TRUNK-3066	deserializing a SerializedObject should pass on deserialization errors
TRUNK-3049	Ugly screen when upgrading to OpenMRS 1.9
TRUNK-3082	Missing label for an encounter with no visit on patient dashboard

TRUNK-3068	Patient Dashboard is slow to load
TRUNK-3083	Missing description when saving patient ids in cohort builder should give user friendly error message
TRUNK-3057	Creating concept mappings fails with legacy code
TRUNK-3078	Concept reference term auto compete is broken in IE
TRUNK-1962	Drug regimen "Scheduled Stop Date" not shown in regimen list or cannot stop regimen with future dates
TRUNK-3073	Fetching concept reference terms and map types by name should be case insensitive
TRUNK-2273	Avoid Duplicate Rows in Patient_State Table
TRUNK-3055	JspException thrown on clicking the Visits category under settings
TRUNK-3001	Add initialization/update wizard messages for languages other than english
TRUNK-37	Add logging table for merged patients
TRUNK-2198	Implement voiding of PersonNames
TRUNK-3029	Determine correct length for datatype and handler config hibernate properties
TRUNK-3060	Database setup wizard fails to complete
TRUNK-2589	Concept doesn't have flexible methods for getting a name by locale, type, and tags
TRUNK-3033	Force multipart and POST form settings in LongFreeTextFileUploadHandler getWidgetHtml method
TRUNK-222	Unable to find patients if their name is less than 3 characters
TRUNK-3036	TRUNK-3034 In the CustomDatatypeHandler interface, remove the render method
TRUNK-3034	Refactor CustomDatatype and CustomDatatypeHandler to make the interface simpler
TRUNK-2734	Refactor Form Resources to use Custom Datatypes
TRUNK-3035	TRUNK-3034 In the CustomDatatype interface, replace render method with a summary view method
TRUNK-3038	TRUNK-3034 FieldGenDatatypeHandler and WebDatatypeHandler should both extend a new interface
TRUNK-3039	TRUNK-3034 Refactor FormResource-related code to use the newly-refactored interfaces
TRUNK-3037	TRUNK-3034 Add DownloadableDatatypeHandler interface
TRUNK-3046	Liquibase uses wrong types in MySQL
TRUNK-3042	Duplicate message code within message.properties file
TRUNK-3058	Encounter.addProvider(EncounterRole, Provider) should prevent adding duplicate providers for the same role
TRUNK-1925	Support Multiple Databases in OpenMRS Installation and Update
TRUNK-2652	TRUNK-1925 Liquibase Updates Need to be Backward-Consistent, Yet Support All Databases
TRUNK-3053	ProviderService.getProviderByUuid(String) has a typo
TRUNK-39	Multiple providers per encounter

TRUNK-2064	cannot use multiple globalproperties portlets on a single page
TRUNK-1926	Current version of liquibase has bugs.
TRUNK-3032	Patient Merge Failed when records have the same identifier with the same identifier type
TRUNK-2330	Include the default locale constant value when getting locales in order
TRUNK-2381	Data Entry Statistics Module - Includes voided encounters and obs
TRUNK-1976	openmrs-lib-cache temp directories not being deleted
TRUNK-2912	Active visit portlet on dashboard should show date + time in a prettier way
TRUNK-3041	Fix build on JDK7
TRUNK-2621	TRUNK-1925 Installation Wizard Should Automatically Select Correct Hibernate Dialect
TRUNK-3040	OpenMRS ENGLISH to SINHALA-Language Localization
TRUNK-2347	Revision Number Not Indicated In Web Application
TRUNK-2986	Get rid of the authentication step during test installation
TRUNK-3003	User should get redirected back to the remote details setup page when authentication fails
TRUNK-1829	Cannot save PersonAttributes of type User
TRUNK-2896	change functionality of isObsGrouping method to return hasGroupMembers(true) instead of hasGroupMembers(false)
TRUNK-438	Add a "Settings" page and Rename Manage Global Properties page
TRUNK-2272	EL functions defined in modules are not accessible
TRUNK-2971	Add Allergy dialog box should show date picker widget for selecting the start date
TRUNK-3019	jQuery not defined error
TRUNK-3015	Event Listeners duplicated at Spring restart
TRUNK-2804	Include a link to the documentation sprint book on the help page
TRUNK-2818	Persian Translation
TRUNK-2916	EncounterValidator should prevent creation of encounters with encounterDatetime in the future
TRUNK-2907	HibernateEnumType not finding module methods
TRUNK-2992	Bad module prevents OpenMRS from starting entirely
TRUNK-1763	Make delete more obvious on global property page
TRUNK-2674	Patient is unintentionally deleted while replacing his/her drug regimen from the regimen tab of the dashboard
TRUNK-2393	Add AOP around save methods to invoke validators
TRUNK-2981	Cannot save relationship type views
TRUNK-2964	Cannot save program workflow

TRUNK-3187	Limiting to a maximum number of search widget results doesn't work occasionally
TRUNK-427	Change Patient Identifier Location to be optional
TRUNK-3171	Removing concept mapping is broken
TRUNK-3162	Update Portuguese Translation
TRUNK-3140	Patient Dashboard Encounters are not sorted by date. Clicking on Encounter Date doesn't sort them.
TRUNK-3126	In patientHeader.jsp, the org.openmrs.patientDashboard.afterLastEncounter extension point should be moved outside of the <c:if test="!\$not visitsEnabled https://tickets.openmrs.org/browse/TRUNK-3126">
TRUNK-3131	Can't update core logic module automatically
TRUNK-3145	When you delete an encounter you are not returned to the dashboard and the dashboard isn't refreshed when click back
TRUNK-3139	Error when removing the patient program completion date: A completion date cannot be before an enrollment date
TRUNK-3130	Unable to start openmrs as web daemon
TRUNK-3156	Unable to add new global properties: Advanced Settings (Global Properties) page doesn't show the save button; Settings page doesn't allow for new properties
TRUNK-2240	Allow "end this visit now" from edit visit page
TRUNK-21	Changing workflow states on dashboard fails silently if date is blank or before date of start of current state
TRUNK-1714	Program/Workflow have problems with concept search
TRUNK-2305	Default locale doesn't work right when creating new users
TRUNK-2996	Initial setup wizard language selection language spellings not correct
TRUNK-3119	Patient merge not working for some locales
TRUNK-3129	Missing options in Concept Drug Management Page
TRUNK-3150	"true" and "false" concepts loaded improperly in ConceptServiceImpl
TRUNK-3136	Missing Link on Dashboard to Edit Encounters
TRUNK-3154	OpenMRS webapp should also map *.page and *.action to the openmrs servlet
TRUNK-2639	Drugs are not showing up in the concept search in the concept dictionary
TRUNK-2630	Login takes user to last page of previous user
TRUNK-3137	Add New Concept Page Broken
TRUNK-3109	Remove java keywords from jsp
TRUNK-3005	ConceptValidator finds duplicate names only for the current system locale
TRUNK-3048	When searching for patients by name, exact matches should be shown first
TRUNK-3241	PersonAddresses get voided and recreated on form submission
TRUNK-3235	in liquibase changeset 20110301-1030, the new concept mapping types should use standardized uuids instead of random ones
TRUNK-3233	Increase drug table name column length to 255 characters

TRUNK-3022	Unable to use the the new release testing feature to upgrade a 1.6.4 database
TRUNK-3248	Unable to edit multiple Drugs
TRUNK-3236	Unlocking account: number format exception when LockoutTimestamp set to blank
TRUNK-3173	Test Installation type fails to complete
TRUNK-3161	Account locked
TRUNK-1874	CSRF Attack error occur during patient search with Tomcat 7
TRUNK-3234	Failed to run sql dump file with testing installation method
TRUNK-3237	Change the default value for the default concept map type global property to NARROWER-THAN
TRUNK-3228	Provider search doesn't search on provider identifier
TRUNK-3133	Boolean dynamic types do not load correctly in OpenMRS Settings
TRUNK-3229	Reselect visit attribute values on error
TRUNK-3364	Unable to complete initial setup in openmrs trunk
TRUNK-2138	Add Location Attributes
TRUNK-3290	Override provider.getName method to look at provider.person.name
TRUNK-3297	Error displaying person attributes on user view page
TRUNK-412	Additional Attributes on Concept Mapping
TRUNK-3333	Voiding an encounter "deletes" the provider and the encounter cannot be unvoided
TRUNK-2510	Pretty Error Message for: Patient is missing the following required identifier(s): HAS Dossier Number
TRUNK-3340	Use getUuid instead of field access in BaseOpenmrsObject
TRUNK-3298	concept_reference_term uuids need to remain consistent across implementations during 1.9 upgrade
TRUNK-2644	Convert Global Property column to varchar
TRUNK-3248	Unable to edit multiple Drugs
TRUNK-3039	TRUNK-3034 Refactor FormResource-related code to use the newly-refactored interfaces
TRUNK-3022	Unable to use the the new release testing feature to upgrade a 1.6.4 database
TRUNK-2742	Make rules created by the Arden translation thread safe
TRUNK-3109	Remove java keywords from jsp
TRUNK-3137	Add New Concept Page Broken
TRUNK-1874	CSRF Attack error occur during patient search with Tomcat 7
TRUNK-3272	Cannot log into OpenMRS 1.9.0 after new install



Unknown macro: 'cloak'

## 74 New Features Added

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[Click here to see all 74 new features added in OpenMRS 1.9.](#)

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TRUNK-334	Consistent, well-document support for web service access to OpenMRS API
TRUNK-409	Improved mobile data collection
TRUNK-2297	Add privilege checks around retire and unretire inline forms on the concept form
TRUNK-2314	Add retire method for concept datatypes to concept service
TRUNK-2461	Fix DWRVisitService.findVisitsByPatient
TRUNK-2488	Add ability to specify changelog files when checking for unrun database changes
TRUNK-48	Add 'Visit' to data model
TRUNK-406	We need good data quality tools bundled and with similar workflow
TRUNK-2044	Add Provider Object
TRUNK-436	Add more information to System Information page
TRUNK-427	Change Patient Identifier Location to be optional
TRUNK-440	Enhance the management of stop words for concept name indexing
TRUNK-18	Add more @shoulds and junit test cases
TRUNK-26	Initialization / install wizard should have a default simple mode
TRUNK-1587	Allow modules to be aware of other modules without requiring them
TRUNK-47	Implementer not notified when modules don't restart alongside system restart
TRUNK-389	improve patient search support for multiple names
TRUNK-1798	Create a standalone all-in-one package with embedded server and db
TRUNK-2067	Improve location hierarchy "simple" widget
TRUNK-2138	Add Location Attributes
TRUNK-2320	Simple installer should let you choose whether or not to add demo data
TRUNK-2329	Add outcome as a property of Patient Program
TRUNK-2394	Can we use the search widget to "list all items" too?
TRUNK-2444	Port Arden changes from custom CHICA 1.5.x build to main codebase
TRUNK-2590	alert pop up required when removing relationship
TRUNK-2440	Add method for getting HL7InQueue by its uuid
TRUNK-2502	Add extension point to option.jsp page
TRUNK-262	Add type to global properties table
TRUNK-2008	Add a basic OpenmrsSerializer to core
TRUNK-2152	Add upgrade script to set a preferred identifier for patients without one
TRUNK-19	Require start and discontinue dates for orders
TRUNK-1654	getGroupMembers() returns voided obs
TRUNK-1878	When managing a user, display Created By and Changed By user and datetime
TRUNK-1956	Fix tests with @Ignore in ConceptServiceTest
TRUNK-2052	Add Missing help tool tips on the concept form when datatype is changed
TRUNK-2053	Hide preferred concept name radio button and label when a concept has only one name on the concept form
TRUNK-2211	Add voidPersonAddress method in PersonService
TRUNK-2294	Add uuid search to all PropertyEditors
TRUNK-2295	Voiding a visit should ask for confirmation, and show how many dependent object will be deleted
TRUNK-2471	Generic mechanism for validating field lengths

TRUNK-2485	The fieldGen for String should support an options the displays a textarea instead of a text field
TRUNK-2655	Register BinaryDataHandler and BinaryStream handler with ObsDAO
TRUNK-368	Define Address Formats Outside of Openmrs-Servlet
TRUNK-2447	Add Show Verbose to the new jquery search widgets
TRUNK-2141	Make the number of results to display per page and total hits returned in the jquery search widget to be configurable
TRUNK-2706	Cleanup code in the new search widgets
TRUNK-35	Add mergePatients method that takes in multiple patients
TRUNK-1602	Add checkstyle check for "new Date().getTime()"
TRUNK-1643	add ability to administer hl7_source table to administration page
TRUNK-1919	Add two-way hash method
TRUNK-1922	Allow database driver to be specified in a runtime property
TRUNK-1997	Create global property patientSearch.matchMode during install
TRUNK-2009	Implement TextHandler for Complex Obs
TRUNK-2109	use a global property for the app name in the welcome page
TRUNK-2131	Add 'Visit Attribute' to data model
TRUNK-2220	Date fields should also display the date picker when they receive focus
TRUNK-2283	Location.isInHierarchy is inefficient
TRUNK-2514	Contribution to messages_fr.properties for reporting
TRUNK-52	Need date_changed and changed_by in person_address table
TRUNK-2585	When creating a new patient , the identifier row can be removed even if it is the only identifier row
TRUNK-2817	Set a default EncounterVisitHandler when upgrading to 1.9
TRUNK-2441	New Extension Point in headerfull.jsp for Feedback Module
TRUNK-1846	Support History of Person Addresses
TRUNK-1877	forEachRecord tag does not support reportObject
TRUNK-1909	Create new getConceptsByMapping API method that returned retired concept
TRUNK-1929	Adding Delete Field functionality
TRUNK-1943	Add a text attribute discontinuedReasonNonCoded (varchar 255) to Order object
TRUNK-2017	Add new objects and attributes to current order and drug order objects to support the Order Entry API
TRUNK-2035	Add hibernate mappings and liquibase changesets to support the Order Entry API
TRUNK-2142	Grouping encounters in dashboard by date
TRUNK-2201	Remove concept name rows for removed names on the concept form
TRUNK-2292	Add web.xml mapping for web services
TRUNK-1952	Add placeholder attribute to search boxes
TRUNK-1937	Add date_changed and changed_by to the person_relationship and patient_identifier tables



Unknown macro: 'cloak'

## User Interface Changes

- The Manage Global Properties link has been changed into Settings where the global properties are grouped according to category. The old style of listing all without grouping can be accessed from the Advanced Settings link.
- The Encounters tab on the patient dashboard is replaced with Visits unless you set the visits.enabled setting to false.

## Introduction of Concept Reference Terms

By default, when you upgrade to 1.9, all of your existing concept mappings are mapped as "NARROWER-THAN". If you actually want some of your concept mappings to be "SAME-AS" mappings (which would be the case if you are using mappings to uniquely identify concepts without using their concept id, for example), then before you migrate you can specify this by using the "comment" column of the concept\_map table to specify the behavior that you want.

In summary (assuming a 1.6 -> 1.9 upgrade):

- In your pre-migration 1.6 system, in the concept\_map table, update the comment field with the *name* of the map type that you want to apply to the mapping, prefixed with the words "Map Type: ". Valid concept map type names include "NARROWER-THAN", "SAME-AS", and "BROADER-THAN". For example, you would say: "Map Type: SAME-AS".

- If you are running a sync environment, the following groovy script might help do this (you'll want to set the source names and map type to meet your own specifications):

```
def typeName = "Map Type: SAME-AS";
def sourceNames = ["PIH", "org.openmrs.module.mdrtb"];
for (sourceName in sourceNames) {
    org.openmrs.ConceptSource source = concept.getConceptSourceByName(sourceName);
    List conceptMaps = concept.getConceptsByConceptSource(source);
    for (conceptMap in conceptMaps) {
        if (!typeName.equals(conceptMap.getComment())) {
            conceptMap.setComment(typeName);
            concept.saveConcept(conceptMap.getConcept());
        }
    }
}
```

For more information, see: <https://tickets.openmrs.org/browse/TRUNK-3296>

## Core and Bundled Modules

This module is a core module in OpenMRS 1.9. It can be upgraded, but can not be removed:

Core Module	Version
<a href="#">Logic</a>	0.5.2

These modules are bundled with OpenMRS 1.9. They will be started automatically and can be removed if desired.

Bundled Module	Version
<a href="#">HTML Form Entry</a>	1.9.3
<a href="#">Reporting</a>	0.7.1.1
<a href="#">HTML Widgets</a>	1.6.0
<a href="#">Reporting Compatibility</a>	1.5.7
<a href="#">Serialization.xstream</a>	0.2.5
<a href="#">Xforms</a>	4.0.9.4
<a href="#">Patient Flags</a>	1.3.4
<a href="#">HTML Form Entry Extensions</a>	0.9

## Download



### Download OpenMRS 1.9

- [Download OpenMRS 1.9.0](#) from Sourceforge.net.
- [Other download options are listed on OpenMRS.org.](#)
- OpenMRS 1.9.0 represents revision 27760.

## Upgrading

### Enhanced Validation

Starting in OpenMRS 1.9, every object that you save is *validated* (e.g. checking required fields, not allowing duplicate names). Prior to 1.9 this was not always done, so it is likely that existing pre-1.9 databases have data that is invalid, and 1.9 will not let you save those objects without fixing the validation errors.

To avoid running into this situation at unexpected times, you should use the [Validation Module](#) module before upgrading in production. There are two approaches:

- (better approach, because it uses 1.9's actual validation)
  1. Upgrade a copy of your production database on a test server
  2. Use the Validation module on the test server to identify any invalid items

- 3. Fix these errors on your production server
- 4. repeat, until there are no further validation errors
- (easier approach, but this uses validation in your running version)
  - 1. Use the validation module on your existing production server to identify any invalid items
  - 2. Fix these errors in-place on your production server
  - 3. repeat, until there are no further validation errors

## Release Testing Helper Module

We now offer the Release Testing Helper to help you test the upgrade to OpenMRS 1.9.0 using your existing data. You can get more information about this module by reading [Release Testing Helper Module](#) on the OpenMRS Wiki. [A video recording of how to use the Release Testing Helper is available on YouTube.](#)

## Contributors

A huge thanks to the 71 people that have contributed to the code base and helping us to get this far:

\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm
\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm
\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm
\$usr_nm	\$usr_nm	 Daniel Kayiwa	\$usr_nm	\$usr_nm
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\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm	\$usr_nm
\$usr_nm	 Mike Seaton	\$usr_nm	\$usr_nm	\$usr_nm
\$usr_nm	\$usr_nm	\$usr_nm	 Rafal Korytkowski	\$usr_nm
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Not to mention all the people that contributed in countless other ways to support this release and be a great part of the shaping of this release:

\$usr_nm	\$usr_nm	\$usr_nm
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## For Developers



### Non-Backwards-Compatible Changes for Developers

OpenMRS 1.9 includes a few non-backwards-compatible changes from version 1.8:

- Form no longer has the xslt and template properties. Use the new FormResource API.
- Encounter provider is no longer a mere person but has to be in the new provider tables. So a provider may not be a person. And each encounter provider has to be associated with an encounter role.
- Hibernate upgraded. See [Non-backwards-compatible changes to Hibernate's Type API](#)

## Data Model Changes

The OpenMRS data model diagram for version 1.9.0 can be viewed from the [OpenMRS Data Model](#) page.



Unknown macro: 'toggle-cloak'

Click here to see all database changes in OpenMRS 1.9.



Unknown macro: 'cloak'

- \* (Fixed)Modified edit\_privilege to correct column size
- \* (Fixed)Add a table to enable generic storage of serialized objects
- \* (Fixed)users.retired to BOOLEAN
- \* Changing global\_property.property from varbinary to varchar
- \* Drop the not null person id constraint
- \* (Fixed)Change active\_list\_type.retired to BOOLEAN
- \* (Fixed)Change active\_list\_type.retired to BOOLEAN
- \* (Fixed)Change concept\_name.locale\_preferred to BOOLEAN
- \* Adding index on notification\_alert.date\_to\_expire column
- \* Adding "date\_changed" column to person\_address table
- \* Adding "changed\_by" column to person\_address table
- \* Add 'location\_behavior' column to patient\_identifier\_type table
- \* Drop Not-Null constraint from location\_id column in patient\_identifier table
- \* Create table to store concept stop words to avoid in search key indexing
- \* Inserting the initial concept stop words
- \* Adding the discontinued\_reason\_non\_coded column to orders.
- \* Adding 'start\_date' column to person\_address table
- \* Adding 'end\_date' column to person\_address table
- \* Adding "date\_changed" column to patient\_identifier table
- \* Adding "changed\_by" column to patient\_identifier table
- \* Adding "date\_changed" column to relationship table
- \* Adding "changed\_by" column to relationship table
- \* Increasing the serialized\_data column of serialized\_object to hold mediumtext
- \* Dropping unused date\_started column from obs table
- \* Dropping unused date\_stopped column from obs table
- \* Adding correct foreign key for concept\_answer.answer\_drug
- \* Create the person\_merge\_log table
- \* Create visit type table

- \* Create the visit table and add the foreign key for visit\_type
- \* (Fixed)Changed visit.voided to BOOLEAN
- \* Adding visit\_id column to encounter table
- \* Adding the start\_date column to relationship.
- \* Adding the end\_date column to relationship.
- \* Creating visit\_attribute\_type table
- \* (Fixed)Change visit\_attribute\_type.retired to BOOLEAN
- \* Refactoring visit\_attribute\_type table (devs only)
- \* Creating visit\_attribute table
- \* (Fixed)Change visit\_attribute.voided to BOOLEAN
- \* Increasing maximum length of patient identifier type regex format
- \* Change all empty concept\_source.hl7\_code to NULL
- \* Add unique constraint to the concept\_source table
- \* Adding the outcomesConcept property to Program
- \* Adding the outcome property to PatientProgram
- \* Creating location\_attribute\_type table
- \* (Fixed)Change visit\_attribute.retired to BOOLEAN
- \* Refactoring location\_attribute\_type table (devs only)
- \* Creating location\_attribute table
- \* (Fixed)Change visit\_attribute.retired to BOOLEAN
- \* Converting general address format (if applicable)
- \* Converting Spain address format (if applicable)
- \* Converting Rwanda address format (if applicable)
- \* Converting USA address format (if applicable)
- \* Converting Kenya address format (if applicable)
- \* Converting Lesotho address format (if applicable)
- \* Converting Malawi address format (if applicable)
- \* Converting Tanzania address format (if applicable)
- \* Renaming the concept\_source table to concept\_reference\_source
- \* Adding concept\_reference\_term table
- \* (Fixed)Change concept\_reference\_term.retired to BOOLEAN
- \* Adding concept\_map\_type table
- \* (Fixed)Change concept\_map\_type.retired to BOOLEAN
- \* Renaming the concept\_map table to concept\_reference\_map
- \* Adding concept\_reference\_term\_id column to concept\_reference\_map table
- \* Renaming concept\_map\_type.isHidden to is\_hidden
- \* Inserting core concept map types
- \* Adding concept\_map\_type\_id column and a foreign key constraint to concept\_reference\_map table
- \* Adding changed\_by column and a foreign key constraint to concept\_reference\_map table
- \* Adding date\_changed column and a foreign key constraint to concept\_reference\_map table
- \* Adding concept\_reference\_term\_map table
- \* Creating concept reference terms from existing rows in the concept\_reference\_map table
- \* Adding foreign key constraint to concept\_reference\_map.concept\_reference\_term\_id column
- \* Dropping foreign key constraint on concept\_reference\_map.source column
- \* Dropping concept\_reference\_map.source column
- \* Dropping concept\_reference\_map.source\_code column
- \* Dropping concept\_reference\_map.comment column
- \* Remove ON DELETE CASCADE from relationship table for person\_a
- \* Remove ON DELETE CASCADE from relationship table for person\_b
- \* (Fixed)Changing from smallint to BOOLEAN type on BOOLEAN properties
- \* Updating logging level global property
- \* Void all attributes that have empty string values.
- \* Create provider table
- \* (Fixed)Change provider.retired to BOOLEAN
- \* Creating provider\_attribute\_type table
- \* (Fixed)Change provider\_attribute\_type.retired to BOOLEAN
- \* Refactoring provider\_attribute\_type table (devs only)
- \* Creating provider\_attribute table
- \* (Fixed)Change provider\_attribute.voided to BOOLEAN
- \* Creating encounter\_role table
- \* (Fixed)Change encounter\_role.retired to BOOLEAN
- \* Creating encounter\_provider table
- \* (Fixed)Change encounter\_provider.voided to BOOLEAN
- \* Inserting the unknown encounter role into the encounter\_role table
- \* Creating providers for persons from the encounter table
- \* Migrating providers from the encounter table to the encounter\_provider table
- \* Dropping the provider\_id column from the encounter table
- \* Allow Global Properties to be typed
- \* Add xslt column back to the form table
- \* Add template column back to the form table
- \* Add obs.previous\_version column (TRUNK-420)
- \* Rename form\_resource table to preserve data; 20111010-1515 reference is for bleeding-edge developers and can be generally ignored
- \* Creating form\_resource table
- \* Fix all the old void\_reason content and add in the new previous\_version to the matching obs row (POTENTIALLY VERY SLOW FOR LARGE OBS TABLES)
- \* Inserting Auto Close Visits Task into 'schedule\_task\_config' table

- \* Deleting non-existing roles from the role\_role table
- \* Associating daemon user with a person
- \* Add the not null person id constraint
- \* Setting super user gender
- \* Add unique uuid constraint and attributes inherited from BaseOpenmrsData to the person\_merge\_log table
- \* Fix empty descriptions on relationship types
- \* Change merged\_data column type to CLOB in person\_merge\_log table
- \* Create clob\_datatype\_storage table
- \* Add date\_changed column to drug table
- \* Add changed\_by column to drug table
- \* Increase size of drug name column to 255 characters



Unknown macro: 'cloak'

## End Of Life (EOL) announcement



### OpenMRS 1.6 is no longer supported

As of described in [Unsupported Releases \(EOL\)](#), OpenMRS can only support up to three released versions at a time (the current release and then two versions back). With the release of OpenMRS 1.9.0, support is no longer provided by the core [Development Team](#) for OpenMRS 1.6.x and earlier. This announcement also serves as advance notice that support will end for OpenMRS 1.7.x, concurrent with the release of OpenMRS 1.10.