

# Logic Module

The logic module is a [core module](#) that provides the implementation of the OpenMRS logic service. The majority of the logic service implementation was moved into this module so that the logic service could evolve at a separate pace from the OpenMRS application. OpenMRS cannot run without this module installed.

 For further details about the logic service, please refer to the [Logic Service](#) page.

## Download

- Download the logic omod file from the module repository: <https://addons.openmrs.org/#/show/org.openmrs.module.logic>
- View/download the source code from git: <https://github.com/CHIRDL-Openmrs-Modules/logic>

## Logic Module Release Notes

### 0.5.0.1

The purpose of this version was to have a version of logic that doesn't declare an upper bound on its allowed OpenMRS version. (0.5 only works up to OpenMRS 1.8.\*, so it can't be used with OpenMRS 1.9...)

It includes a few other tickets whose code had already been committed:

- [LOGIC-92](#) - indexDate needs to be inclusive (tmdugan)
- [LOGIC-94](#) - Check the cache for a Rule before accessing token registration information from the database (sjmckee)
- [LOGIC-95](#) - Remove the support of finding concepts by ID. Logic is currently only finding them by name (sjmckee)

### 0.5

This version allows you to define rules in Groovy or Java and save them to the database (see [User-defined Rules](#)), has a better UI for managing tokens and rules, and has significant performance improvements when running rules on large cohorts.

### Requirements

This version of the module works with the following OpenMRS versions:

- in the 1.8.x line: any version after 1.8 Beta (from revision 17709)
- in the 1.7.x line: from 1.7.2 (from revision 17710)
- in the 1.6.x line: from 1.6.3 (from revision 17711 – use [this](#) custom version, identical to the one in the module repository but with a more relaxed require\_version.)

### User-visible changes

Ticket	Description
<a href="#">LOGIC-3</a>	Implement asOf() operator for LogicCriteria
<a href="#">LOGIC-42</a>	Edit / Remove Logic Token
<a href="#">LOGIC-47</a>	Make logic module compatible with 1.6+ and replace Derived Concept with LogicRule
<a href="#">LOGIC-54</a>	Patient data source of patient identifier is not implemented
<a href="#">LOGIC-57</a>	PersonDataSource should let you access their person's name
<a href="#">LOGIC-61</a>	Tokens should be case-preserving case-insensitive
<a href="#">LOGIC-62</a>	Better UI for managing logic tokens and rules
<a href="#">LOGIC-67</a>	Groovy rules

### Under-the-hood changes

Ticket	Description
<a href="#">LOGIC-46</a>	Logic Module contains antlr-2.7.6 in its lib folder
<a href="#">LOGIC-59</a>	Logic Rule Token needs a uuid

LOGIC-71	LogicDataSources have their names defined in XML
LOGIC-78	LogicService.eval(..., String, ...) should treat the String as an expression, not a token
LOGIC-79	LogicContext's indexDate operates as a date+time, but it should just operate as a date
LOGIC-80	Logic cache never has any cache hits
LOGIC-64	Rename LogicRuleToken to TokenRegistration
LOGIC-65	Introduce a RuleProvider interface so modules can consistently provide and register rules
LOGIC-68	Allow modules to register LanguageHandlers via Spring
LOGIC-69	Allow users to change names of tokens, while still allowing RuleProviders to access their rules
LOGIC-70	Call afterStartup methods of RuleProviders after the logic module starts up
LOGIC-76	TokenService should cache rules it gets from RuleProviders, so they don't have to be recompiled every time
LOGIC-77	Rules have access to a full Patient, but LogicDataSources don't

### 0.4.1

Ticket	Description	Author
LOGIC-53	LogicService.parse(String) on a badly-formed expression may run forever	djazayeri