The Battle for Wesnoth

Architecture Diagram
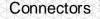
Components ⊗

#	Description
1	Simple Directmedia Layer - Manages video and event handling in the display component
2	Simple Directmedial Layer Image – Loads PNG and other image formats
3	Pango with Cairo – Provides internationalized fonts
4	Display Code – Renders the game board, units, animations, and so forth
5	Boost – Adds a variety of advanced c++ features
6	Lua – Allows scripting of additional game items
7	Game Logic – Controls the main gameplay logic using the attached components
8	AI Code - Drives the behavior of NPC units with in the game
9	Python - Allows scripting of additional game items and Artificial Intelligence
10	Simple Directmedia Layer Network – Supports Network I/O
11	Network – Handles all communication from the client to both the Multiplayer and Content servers
12	Content Server – Manages contributor uploaded content
13	Multiplayer Server – Manages the interaction of players in multiplayer games
14	Content Database – Stores the content used by the Content Server
15	Multiplayer Database – Stores the log containing each move by each player as well as player information
16	Map Generation Module – Creates random maps for players to use
17	Story Line Module – Manages the story events within the system
18	Lobby Module – Handles the setup of multiplayer games
19	Path Finding Module – Directs the units from one location to another
20	WML Parser – Serializes and deserializes WML documents containing game data
21	WML Documents – Stores the definitions of Units, Maps, Campaigns and other gameplay objects

Connectors ⊗

#	Description
1	Events – This connector allows data from the Game Logic to move to the Display module for user interface support
2	Procedur eCalls- This connector is a two-way connector representing calls to and from the Game Logic module to other modules. These procedure calls are standard C++ calls
3	Procedure Calls- This connector represents procedure calls from the Game Module to the Network
4	TCP/IP communication-This connector represents the restful communication to both Multiplayer and Content servers
5	Data Access – This connector represents access of the persistent data stored for multiplayer games
6	Data Access – This connector represents access of the persistent content stored for contributors
7	Procedure Calls- This connector is a two-way asynchronous connector between the Game Logic module and WML Parser which supports passing objects either to disk or to the system
8	Disk IO – This connector represents file-reads and writes of WML files

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