

## CD++ Model Data Form

Title: Hatton Cross Roundabout

Type: DEVS Model

Acronym/Short name: Traffic roundabout

Purpose for which Developed: A model of the Hatton Cross Roundabout which ensures vehicles that safely enters the system and exits the system at their destination exit.

Other Applications for which it is Suitable:

Date Developed/Implemented: 2012, December 20th

Domain: Other

Current Version:

URL:

Description (including characteristics): Hatton Cross Roundabout (HCR) is a modern roundabout where large ring of road composed of six mini roundabouts. In this paper, CD++ Cell-DEVS and RISE software, using the lopez API, are used for simulation to reproduce the behavior of Hatton Cross Roundabout system, and to further identify the factors that affect the throughput of the roundabout system. Cell-DEVS is an extension of DEVS that supports defining and executing cellular automata models [1][2].

### Links to Related Documents

Short Title:

URL:

Description:

Keywords: Discrete event simulation, DEVS models, Cell-DEVS, Cellular automata, Hatton Roundabout system

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Comments: It works fine.