Abstract

Artificial Intelligence (AI) has been studied since 1956, when John McCarthy held his first academic conference, and still growing up now because the field is still very elusive in the field of computer science. AI covers of the machine that is able to think, to be able to evolve and adapt to its environment with the goal of becoming the present environment modelling. With real-time modeling, it is expected to help with the decision-making process fir a more complex cases.

Game Capture The Flag is one method that can describe real-time because the both sides have the same resources, and rely on a strategy to win the game. But there is one problem in the game AI. Most existing AI is static, so the players get bored because the pattern of the game's AI was predictable.

For these reasons, the authors recommend Dynamic Scripting as a method to cope with the static AI by implementing Adaptive Artificial Intelligence (AAI) on Capture The Flag case study. With score of the AAI and static AI as the performance parameter.

Based on the results of testing to four static AIs, it was found that the AAI and AI AI Balanced Random less obtain satisfactory results with his high scores on the AAI. While the Greedy AI and AI scores obtained Defender surpassed the expectations with its balanced score between the static AI with AAI.

Keywords : *reward and punishment, script generation, adaptive artificial intelligence*