

Fig 3 the semantic service corresponding to the machine Mealy

Semantic service JPBankService corresponding to the regular expression language: $(?saveInfo(?jpy+?usd)+?draw(!jpy+!usd))!amount$

Semantic service corresponding to E-ForexService language regular expression: $(? ExInfo? USD! Jpy+? JPY USD position!)!$

The Web service JPBankService in BDO corresponding to the service concept is BankService, Web E-ForexService in BDO corresponding to the service concept is ForeignExchangeService, business service BankService and ForeignExchangeService is converted into the corresponding Mealy! Machine, as shown in figure 4.

Can be used to verify the semantic service JPBankService corresponds to the regular language can be BDO Mealy! Machine to accept, and semantic service E-ForexService corresponds to the regular language can be accepted. So the program is semantically incorrect.

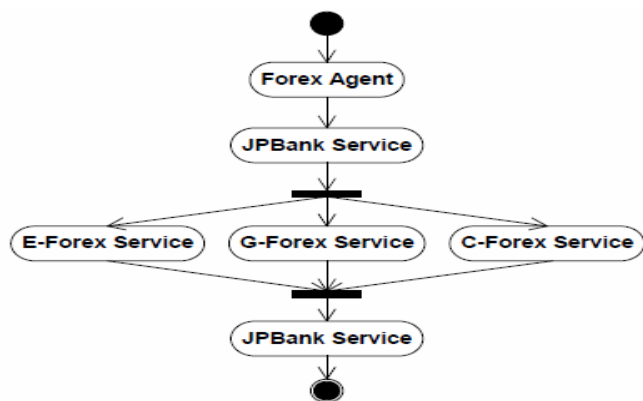


Fig 4 business services corresponding machine Mealy

VI. Conclusions

For the semantic features of the program, based on the traditional Mealy model is extended, proposes a distinction between input and output string Mealy! Machine model. The use of artificial intelligence in more mature ontology as semantic process knowledge base, using Mealy! Machine model and BDO ontology, on the analysis of the existing various program verification method, proposes a program of semantic verification method, combined with an online forex trading platform case, described in detail the method validation process. The method can use the advantage of

ontology theory and automata theory characteristics, the complete procedure of semantic verification.

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