

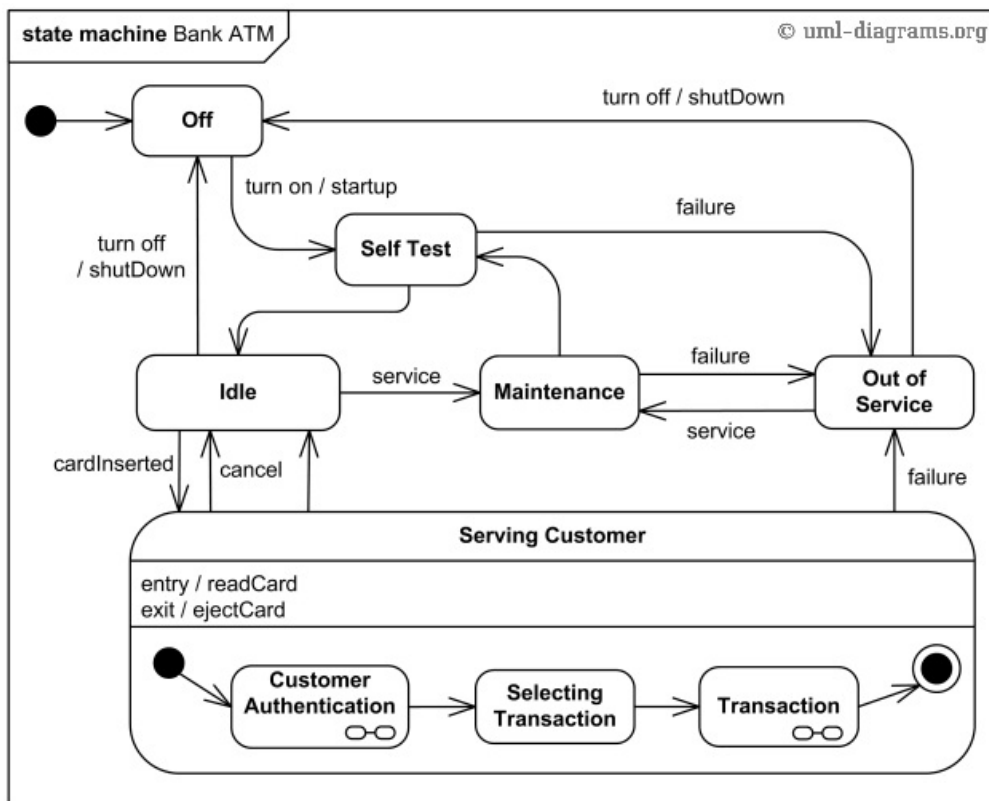
# Bank ATM

## UML State Machine Diagram Example

This is an example of UML **behavioral state machine** diagram showing Bank Automated Teller Machine (ATM) top level state machine.

ATM is initially turned off. After the power is turned on, ATM performs startup action and enters **Self Test** state. If the test fails, ATM goes into **Out of Service** state, otherwise there is **triggerless transition** to the **Idle** state. In this state ATM waits for customer interaction.

The ATM state changes from **Idle** to **Serving Customer** when the customer inserts banking or credit card in the ATM's card reader. On entering the **Serving Customer** state, the entry action **readCard** is performed. Note, that transition from **Serving Customer** state back to the **Idle** state could be triggered by **cancel** event as the customer could cancel transaction at any time.



Behavioral state machine UML diagram example - Bank ATM

**Serving Customer** state is a **composite state** with sequential substates **Customer Authentication**, **Selecting Transaction** and **Transaction**. **Customer Authentication** and **Transaction** are composite states by themselves which is shown with hidden decomposition indicator icon. **Serving Customer** state has **triggerless transition** back to the **Idle** state after transaction is finished. The state also has exit action **ejectCard** which releases customer's card on leaving the state, no matter what caused the transition out of the state.

Noticed a spelling error? Select the text using the mouse and press Ctrl + Enter.



This document describes **UML 2.5** and is based on **OMG™ Unified Modeling Language™ (OMG UML®) 2.5** specification [UML 2.5 FTF - Beta 1].

All UML diagrams were created in **Microsoft Visio** 2007-2016 using **UML 2.2 stencils**. You can send your comments and suggestions to [webmaster](mailto:webmaster@uml-diagrams.org) at [webmaster@uml-diagrams.org](mailto:webmaster@uml-diagrams.org).

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