

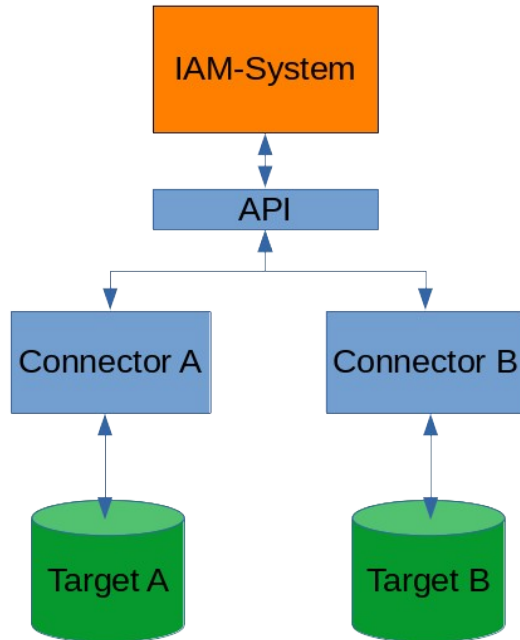
Identity Connector Framework

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Short Intro to ICF



- Provision and Sync from IAM-Systems into target systems (bi-directional)
- Connectors deal with target system and can be developed independently
- Once a Connector is developed (at best) every instance of the target system can be used.
- A Connector can be used in different API implementations

More Connector Properties (SPI)

- Multiple Interfaces
 - *Connector*
 - *CreateOp*
 - *DeleteOp*
 - *SearchOp*
 - *TestOp*
 - *SchemaOp*
 - ...
- Each Connector can have different capabilities
- Stateless by design
- Configuration is provided from outside via API
- Exceptions to throw errors to API
 - *ConnectorException*
 - *AlreadyExistsException*
 - ...

Example Connector Code Snippet

```
@ConnectorClass(displayNameKey = "ExampleConnector.connector.display",
configurationClass = ExampleConnectorConfiguration.class)
public class ExampleConnector implements Connector, SchemaOp, CreateOp, TestOp {

    @Override
    public Configuration getConfiguration() {
        // TODO
        return null;
    }

    @Override
    public void init(Configuration cfg) {
        // TODO
    }

    @Override
    public void dispose() {
        // TODO
    }

    @Override
    public Schema schema() {
        // TODO
        return null;
    }

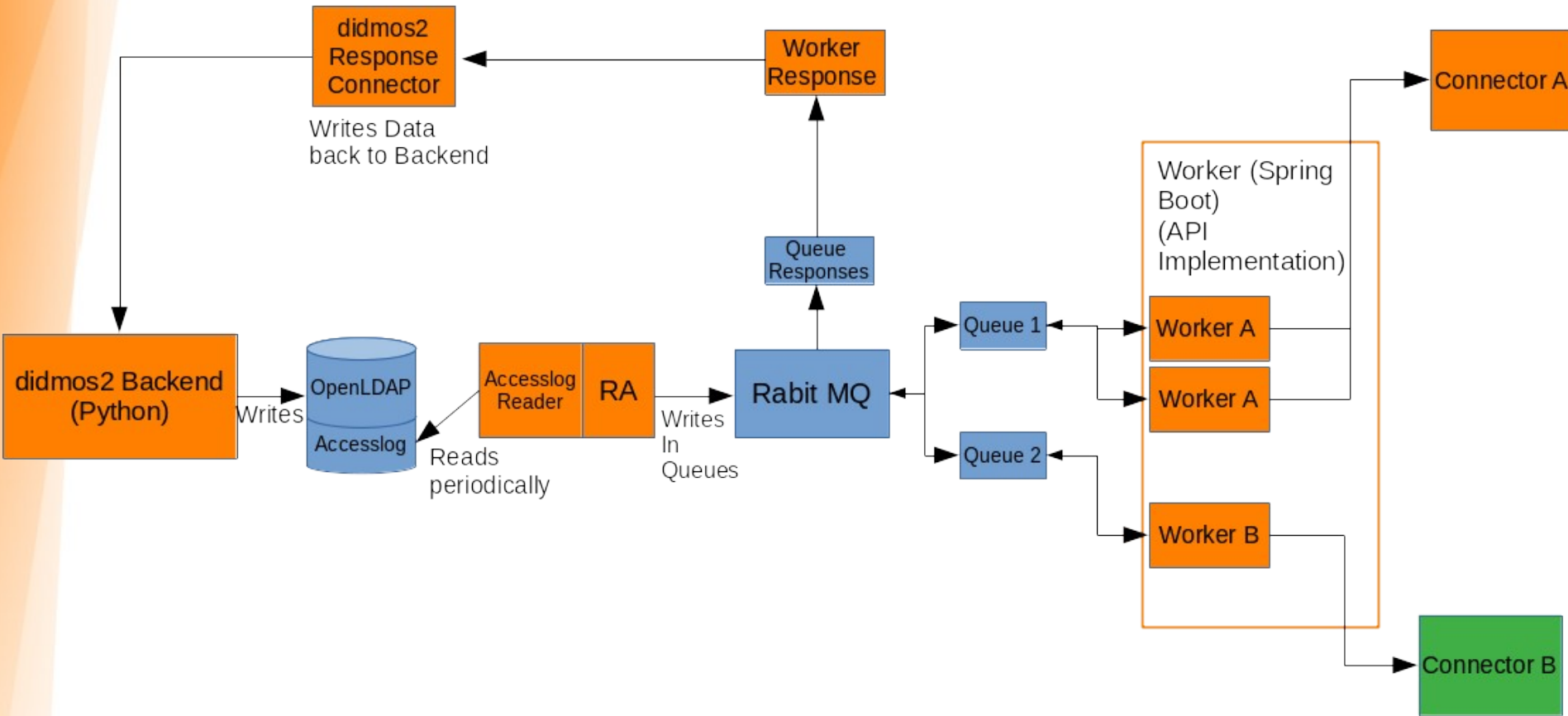
    @Override
    public void test() {
        // TODO
    }

    @Override
    public Uid create(ObjectClass objectClass, Set<Attribute> createAttributes,
        OperationOptions options) {
        // TODO Auto-generated method stub
        return null;
    }
}
```

Who uses ICF

- DAASI International in didmos2 (using ConnId)
- Evolveum in midPoint (using ConnId)
- Oracle in Oracle Identity Manager (Using Sun ICF?)
- Forgerock (Developing OpenICF)
- Tirasa (Developing ConnId)

ICF in didmos2



Pros & Cons (DAASI Point of View)

Pros:

- Open Source
- A lot of different vendors use it
- Thus a kind of de facto standard in Open Source Ecosystem
- Many IdM sync problems are solved in a standardized way
- High flexibility
- Lots of connectors already developed

Cons:

- Mapping between connector schema and target can be difficult when it comes to complex data structures
- Sometimes not enough guidelines (especially in terms of API).
- More a tool set than a framework