

Self Upgrade & State Migration

Three examples on how to handle updates and [state migration](#) :

1. [State Migration](#)
2. : How to implement amigrate
3. method to migrate state between contract updates.
4. [State Versioning](#)
5. : How to use readily use versioning on a state, to simplify updating it later.
6. [Self Update](#)
7. : How to implement a contract that can update itself.

State Migration

The [State Migration example](#) shows how to handle state-breaking changes between contract updates.

It is composed by 2 contracts:

1. Base: A Guest Book were people can write messages.
2. Update: An update in which we remove a parameter and change the internal structure.
3.

```

    Rust
```

contracts/basic-updates/update/src/migrate.rs loading ... [See full example on GitHub](#)

The Migration Method

The migration method deserializes the current state (OldState) and iterates through the messages, updating them to the newPostedMessage that includes thepayment field.

tip Notice that migrate is actually an [initialization method](#) that ignores the existing state ([#init(ignore_state)]), thus being able to execute and rewrite the state.

State Versioning

The [State Versioning example](#) shows how to use [Enums](#) to implement state versioning on a contract.

Versioning simplifies updating the contract since you only need to add a new new version of the structure. All versions can coexist, thus you will not need to change previously existing structures.

The example is composed by 2 contracts:

1. Base: The Guest Book contract using versionedPostedMessages
2. (PostedMessagesV1
3.).
4. Update: An update that adds a new version ofPostedMessages
5. (PostedMessagesV2
6.).
7.

```

    Rust
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contracts/enum-updates/update/src/versioned_msg.rs loading ... [See full example on GitHub](#)

Self Update

The [Self Update example](#) shows how to implement a contract that can update itself.

It is composed by 2 contracts:

1. Base: A Guest Book were people can write messages, implementing aupdate_contract
2. method.
3. Update: An update in which we remove a parameter and change the internal structure.
4.

```

    Rust
```

contracts/self-updates/base/src/update.rs loading ... [See full example on GitHub](#) [Edit this page](#) Last updated on Dec 9, 2023
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