

```

diff --git a/.gitignore b/.gitignore
index 80f9dd1..1612964 100644
--- a/.gitignore
+++ b/.gitignore
@@ -40,7 +40,6 @@ db*
*.fdb*
*.fls
*.gz
-*.pdf

.coverage

diff --git a/accounts/accounts.go b/accounts/accounts.go
index dd7df0b..00420ca 100644
--- a/accounts/accounts.go
+++ b/accounts/accounts.go
@@ -31,10 +31,10 @@ import (
    "fmt"
    "math/big"

-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/interfaces"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/event"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/interfaces"
    "golang.org/x/crypto/sha3"
)

diff --git a/accounts/external/backend.go b/accounts/external/backend.go
index 558700f..8302c0c 100644
--- a/accounts/external/backend.go
+++ b/accounts/external/backend.go
@@ -31,15 +31,15 @@ import (
    "math/big"
    "sync"

-   "github.com/ava-labs/coreth/accounts"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/interfaces"
-   "github.com/ava-labs/coreth/rpc"
-   "github.com/ava-labs/coreth/signer/core/apitypes"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/event"
    "github.com/ethereum/go-ethereum/log"
+   "gitlab.com/flarenetwork/coreth/accounts"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/interfaces"
+   "gitlab.com/flarenetwork/coreth/rpc"
+   "gitlab.com/flarenetwork/coreth/signer/core/apitypes"
)

type ExternalBackend struct {
diff --git a/accounts/keystore/account_cache.go b/accounts/keystore/account_cache.go
index 4c35aa7..f8e0a89 100644
--- a/accounts/keystore/account_cache.go
+++ b/accounts/keystore/account_cache.go
@@ -37,10 +37,10 @@ import (
    "sync"
    "time"

-   "github.com/ava-labs/coreth/accounts"
    mapset "github.com/deckarep/golang-set"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/log"
+   "gitlab.com/flarenetwork/coreth/accounts"
)

// Minimum amount of time between cache reloads. This limit applies if the platform does
diff --git a/accounts/keystore/account_cache_test.go b/accounts/keystore/account_cache_test.go
index 3d341d5..81f80d6 100644
--- a/accounts/keystore/account_cache_test.go
+++ b/accounts/keystore/account_cache_test.go
@@ -37,10 +37,10 @@ import (
    "testing"
    "time"

-   "github.com/ava-labs/coreth/accounts"
    "github.com/cespare/cp"
    "github.com/davecgh/go-spew/spew"
    "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/accounts"
)

var (
diff --git a/accounts/keystore/key.go b/accounts/keystore/key.go
index 71402d3..ad6cc6c 100644
--- a/accounts/keystore/key.go
+++ b/accounts/keystore/key.go
@@ -39,10 +39,10 @@ import (
    "strings"
    "time"

-   "github.com/ava-labs/coreth/accounts"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/google/uuid"
+   "gitlab.com/flarenetwork/coreth/accounts"
)

const (
diff --git a/accounts/keystore/keystore.go b/accounts/keystore/keystore.go
index ff82ef8..e1c177d 100644
--- a/accounts/keystore/keystore.go
+++ b/accounts/keystore/keystore.go
@@ -42,11 +42,11 @@ import (
    "sync"
    "time"

-   "github.com/ava-labs/coreth/accounts"
-   "github.com/ava-labs/coreth/core/types"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/ethereum/go-ethereum/event"
+   "gitlab.com/flarenetwork/coreth/accounts"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

var (
diff --git a/accounts/keystore/keystore_test.go b/accounts/keystore/keystore_test.go
index 651ab70..70fbeb7 100644
--- a/accounts/keystore/keystore_test.go
+++ b/accounts/keystore/keystore_test.go
@@ -38,10 +38,10 @@ import (
    "testing"
    "time"

-   "github.com/ava-labs/coreth/accounts"

```

```

"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/crypto"
"github.com/ethereum/go-ethereum/event"
+ "gitlab.com/flarenetwork/coreth/accounts"
)

var testSigData = make([]byte, 32)
diff --git a/accounts/keystore/passphrase.go b/accounts/keystore/passphrase.go
index 5da41f6..73f26d2 100644
--- a/accounts/keystore/passphrase.go
+++ b/accounts/keystore/passphrase.go
@@ -48,11 +48,11 @@ import (
    "os"
    "path/filepath"

-    "github.com/ava-labs/coreth/accounts"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/math"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/google/uuid"
+    "gitlab.com/flarenetwork/coreth/accounts"
    "golang.org/x/crypto/pbkdf2"
    "golang.org/x/crypto/scrypt"
)

diff --git a/accounts/keystore/presale.go b/accounts/keystore/presale.go
index 1dfbd9c..64f020d 100644
--- a/accounts/keystore/presale.go
+++ b/accounts/keystore/presale.go
@@ -35,9 +35,9 @@ import (
    "errors"
    "fmt"

-    "github.com/ava-labs/coreth/accounts"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/google/uuid"
+    "gitlab.com/flarenetwork/coreth/accounts"
    "golang.org/x/crypto/pbkdf2"
)

diff --git a/accounts/keystore/wallet.go b/accounts/keystore/wallet.go
index 78eac1d..e603ac5 100644
--- a/accounts/keystore/wallet.go
+++ b/accounts/keystore/wallet.go
@@ -29,11 +29,11 @@ package keystore
import (
    "math/big"

-    "github.com/ava-labs/coreth/interfaces"
+    "gitlab.com/flarenetwork/coreth/interfaces"

-    "github.com/ava-labs/coreth/accounts"
-    "github.com/ava-labs/coreth/core/types"
    "github.com/ethereum/go-ethereum/crypto"
+    "gitlab.com/flarenetwork/coreth/accounts"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

// keystoreWallet implements the accounts.Wallet interface for the original
diff --git a/accounts/scwallet/hub.go b/accounts/scwallet/hub.go
index 7a630fa..c05ba6f 100644
--- a/accounts/scwallet/hub.go
+++ b/accounts/scwallet/hub.go
@@ -51,11 +51,11 @@ import (
    "sync"
    "time"

-    "github.com/ava-labs/coreth/accounts"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/event"
    "github.com/ethereum/go-ethereum/log"
    psc "github.com/gballet/go-libpcsclite"
+    "gitlab.com/flarenetwork/coreth/accounts"
)

// Scheme is the URI prefix for smartcard wallets.
diff --git a/accounts/scwallet/wallet.go b/accounts/scwallet/wallet.go
index fcecc10..b912e21 100644
--- a/accounts/scwallet/wallet.go
+++ b/accounts/scwallet/wallet.go
@@ -43,14 +43,14 @@ import (
    "sync"
    "time"

-    "github.com/ava-labs/coreth/accounts"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/interfaces"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/ethereum/go-ethereum/log"
    psc "github.com/gballet/go-libpcsclite"
    "github.com/status-im/keycard-go/derivationpath"
+    "gitlab.com/flarenetwork/coreth/accounts"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/interfaces"
)

// ErrPairingPasswordNeeded is returned if opening the smart card requires pairing with a pairing
diff --git a/chain/chain_test.go b/chain/chain_test.go
index 2d8c7e9..9057d9d 100644
--- a/chain/chain_test.go
+++ b/chain/chain_test.go
@@ -9,20 +9,20 @@ import (
    "math/rand"
    "testing"

-    "github.com/ava-labs/coreth/accounts/keystore"
-    "github.com/ava-labs/coreth/consensus/dummy"
-    "github.com/ava-labs/coreth/core"
-    "github.com/ava-labs/coreth/core/rawdb"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/eth"
-    "github.com/ava-labs/coreth/eth/ethconfig"
-    "github.com/ava-labs/coreth/node"
-    "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/log"
    "github.com/ethereum/go-ethereum/rlp"
+    "gitlab.com/flarenetwork/coreth/accounts/keystore"
+    "gitlab.com/flarenetwork/coreth/consensus/dummy"
+    "gitlab.com/flarenetwork/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core/rawdb"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/eth"
+    "gitlab.com/flarenetwork/coreth/eth/ethconfig"
+    "gitlab.com/flarenetwork/coreth/node"
+    "gitlab.com/flarenetwork/coreth/params"
)

```

```

type testChain struct {
diff --git a/chain/coreth.go b/chain/coreth.go
index 95018be..bc107de 100644
--- a/chain/coreth.go
+++ b/chain/coreth.go
@@ -7,15 +7,15 @@ import (
    "fmt"
    "time"

-   "github.com/ava-labs/coreth/consensus/dummy"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/eth"
-   "github.com/ava-labs/coreth/node"
-   "github.com/ava-labs/coreth/rpc"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "gitlab.com/flarenetwork/coreth/consensus/dummy"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/eth"
+   "gitlab.com/flarenetwork/coreth/node"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

var (
diff --git a/chain/counter_test.go b/chain/counter_test.go
index 7209ac5..4fd88fe 100644
--- a/chain/counter_test.go
+++ b/chain/counter_test.go
@@ -15,8 +15,8 @@ import (

    "testing"

-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/types"

    "github.com/ethereum/go-ethereum/log"
)

diff --git a/chain/multicoins_test.go b/chain/multicoins_test.go
index a2ce4cb..f40a678 100644
--- a/chain/multicoins_test.go
+++ b/chain/multicoins_test.go
@@ -28,19 +28,19 @@ import (
    "strings"
    "testing"

-   "github.com/ava-labs/coreth/accounts/keystore"
-   "github.com/ava-labs/coreth/consensus/dummy"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/eth"
-   "github.com/ava-labs/coreth/eth/ethconfig"
-   "github.com/ava-labs/coreth/node"
+   "github.com/ethereum/go-ethereum/accounts/abi"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/crypto"
+   "github.com/ethereum/go-ethereum/log"
+   "gitlab.com/flarenetwork/coreth/accounts/keystore"
+   "gitlab.com/flarenetwork/coreth/consensus/dummy"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/eth"
+   "gitlab.com/flarenetwork/coreth/eth/ethconfig"
+   "gitlab.com/flarenetwork/coreth/node"
)

// TestMulticoins tests multicoins low-level state management and regular
diff --git a/chain/payment_test.go b/chain/payment_test.go
index 5d9da4d..f17e260 100644
--- a/chain/payment_test.go
+++ b/chain/payment_test.go
@@ -7,8 +7,8 @@ import (
    "math/big"
    "testing"

-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/log"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

// TestPayment tests basic payment (balance, not multi-coin)
diff --git a/chain/subscribe_accepted_heads_test.go b/chain/subscribe_accepted_heads_test.go
index 0a94bfd..ab7315e 100644
--- a/chain/subscribe_accepted_heads_test.go
+++ b/chain/subscribe_accepted_heads_test.go
@@ -4,10 +4,10 @@ import (
    "math/big"
    "testing"

-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/log"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

func TestAcceptedHeadSubscriptions(t *testing.T) {
diff --git a/chain/subscribe_block_logs_test.go b/chain/subscribe_block_logs_test.go
index 26661da..2b2d2ab 100644
--- a/chain/subscribe_block_logs_test.go
+++ b/chain/subscribe_block_logs_test.go
@@ -6,10 +6,10 @@ import (
    "testing"
    "time"

-   "github.com/ava-labs/coreth/eth/filters"
+   "gitlab.com/flarenetwork/coreth/eth/filters"

-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

func TestBlockLogsAllowUnfinalized(t *testing.T) {
diff --git a/chain/subscribe_transactions_test.go b/chain/subscribe_transactions_test.go
index aac6db4..9388dae 100644
--- a/chain/subscribe_transactions_test.go
+++ b/chain/subscribe_transactions_test.go
@@ -4,10 +4,10 @@ import (
    "math/big"

```

```

"testing"
- "github.com/ava-labs/coreth/eth/filters"
+ "gitlab.com/flarenetwork/coreth/eth/filters"
- "github.com/ava-labs/coreth/core/types"
+ "github.com/ethereum/go-ethereum/common"
+ "gitlab.com/flarenetwork/coreth/core/types"
)

func TestSubscribeTransactions(t *testing.T) {
diff --git a/chain/test_chain.go b/chain/test_chain.go
index e4420de..3d71d82 100644
--- a/chain/test_chain.go
+++ b/chain/test_chain.go
@@ -8,17 +8,17 @@ import (
    "math/big"
    "testing"
- "github.com/ava-labs/coreth/accounts/keystore"
- "github.com/ava-labs/coreth/consensus/dummy"
- "github.com/ava-labs/coreth/core"
- "github.com/ava-labs/coreth/core/rawdb"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/eth"
- "github.com/ava-labs/coreth/eth/ethconfig"
- "github.com/ava-labs/coreth/node"
- "github.com/ava-labs/coreth/params"
+ "github.com/ethereum/go-ethereum/common"
+ "github.com/ethereum/go-ethereum/common/hexutil"
+ "gitlab.com/flarenetwork/coreth/accounts/keystore"
+ "gitlab.com/flarenetwork/coreth/consensus/dummy"
+ "gitlab.com/flarenetwork/coreth/core"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/eth"
+ "gitlab.com/flarenetwork/coreth/eth/ethconfig"
+ "gitlab.com/flarenetwork/coreth/node"
+ "gitlab.com/flarenetwork/coreth/params"
)

var (
diff --git a/consensus/consensus.go b/consensus/consensus.go
index 6bc13a8..af462ca 100644
--- a/consensus/consensus.go
+++ b/consensus/consensus.go
@@ -30,11 +30,11 @@ package consensus
import (
    "math/big"
- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
- "github.com/ava-labs/coreth/rpc"
+ "github.com/ethereum/go-ethereum/common"
+ "gitlab.com/flarenetwork/coreth/core/state"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
+ "gitlab.com/flarenetwork/coreth/rpc"
)

// ChainHeaderReader defines a small collection of methods needed to access the local
diff --git a/consensus/dummy/consensus.go b/consensus/dummy/consensus.go
index 89af334..e93724d 100644
--- a/consensus/dummy/consensus.go
+++ b/consensus/dummy/consensus.go
@@ -10,13 +10,13 @@ import (
    "math/big"
    "time"
- "github.com/ava-labs/coreth/consensus"
- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
- "github.com/ava-labs/coreth/rpc"
+ "github.com/ethereum/go-ethereum/common"
+ "github.com/ethereum/go-ethereum/trie"
+ "gitlab.com/flarenetwork/coreth/consensus"
+ "gitlab.com/flarenetwork/coreth/core/state"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
+ "gitlab.com/flarenetwork/coreth/rpc"
)

type OnFinalizeCallbackType = func(chain consensus.ChainHeaderReader, header *types.Header, state *state.StateDB, txs []*types.Transaction, receipts []*types.Receipt, uncles []*types.Header) error
diff --git a/consensus/dummy/dynamic_fees.go b/consensus/dummy/dynamic_fees.go
index 8050364..9221cec 100644
--- a/consensus/dummy/dynamic_fees.go
+++ b/consensus/dummy/dynamic_fees.go
@@ -9,10 +9,10 @@ import (
    "math/big"
- "github.com/ava-labs/avalanchego/utils/wrappers"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
+ "github.com/ethereum/go-ethereum/common"
+ "github.com/ethereum/go-ethereum/common/math"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
)

var (
diff --git a/consensus/dummy/dynamic_fees_test.go b/consensus/dummy/dynamic_fees_test.go
index fd45082..bc6813d 100644
--- a/consensus/dummy/dynamic_fees_test.go
+++ b/consensus/dummy/dynamic_fees_test.go
@@ -8,10 +8,10 @@ import (
    "math/big"
    "testing"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
+ "github.com/ethereum/go-ethereum/common/math"
+ "github.com/ethereum/go-ethereum/log"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
)

func testRollup(t *testing.T, longs [uint64, roll int]) {
diff --git a/consensus/misc/dao.go b/consensus/misc/dao.go
index a0ab402..486f97a 100644
--- a/consensus/misc/dao.go
+++ b/consensus/misc/dao.go
@@ -31,9 +31,9 @@ import (
    "errors"
    "math/big"
- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
)

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+ "gitlab.com/flarenetwork/coreth/core/state"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
)

var (
diff --git a/consensus/misc/forks.go b/consensus/misc/forks.go
index 6199e11..63ce4f0 100644
--- a/consensus/misc/forks.go
+++ b/consensus/misc/forks.go
@@ -29,9 +29,9 @@ package misc
import (
    "fmt"

- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/types"
+ "github.com/ethereum/go-ethereum/common"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
)

// VerifyForkHashes verifies that blocks conforming to network hard-forks do have
diff --git a/core/block_validator.go b/core/block_validator.go
index f7092ee..6993bf1 100644
--- a/core/block_validator.go
+++ b/core/block_validator.go
@@ -29,11 +29,11 @@ package core
import (
    "fmt"

- "github.com/ava-labs/coreth/consensus"
- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
+ "github.com/ethereum/go-ethereum/trie"
+ "gitlab.com/flarenetwork/coreth/consensus"
+ "gitlab.com/flarenetwork/coreth/core/state"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
)

// BlockValidator is responsible for validating block headers, uncles and
diff --git a/core/blockchain.go b/core/blockchain.go
index 7e03462..5073b6a 100644
--- a/core/blockchain.go
+++ b/core/blockchain.go
@@ -36,19 +36,19 @@ import (
    "sync/atomic"
    "time"

- "github.com/ava-labs/coreth/consensus"
- "github.com/ava-labs/coreth/core/rawdb"
- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/state/snapshot"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/core/vm"
- "github.com/ava-labs/coreth/params"
+ "github.com/ethereum/go-ethereum/common"
+ "github.com/ethereum/go-ethereum/ethdb"
+ "github.com/ethereum/go-ethereum/event"
+ "github.com/ethereum/go-ethereum/log"
+ "github.com/ethereum/go-ethereum/trie"
+ lru "github.com/hashicorp/golang-lru"
+ "gitlab.com/flarenetwork/coreth/consensus"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
+ "gitlab.com/flarenetwork/coreth/core/state"
+ "gitlab.com/flarenetwork/coreth/core/state/snapshot"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/core/vm"
+ "gitlab.com/flarenetwork/coreth/params"
)

var (
diff --git a/core/blockchain_test.go b/core/blockchain_test.go
index 07cf8ec..74981e8 100644
--- a/core/blockchain_test.go
+++ b/core/blockchain_test.go
@@ -7,14 +7,14 @@ import (
    "math/big"
    "testing"

- "github.com/ava-labs/coreth/consensus/dummy"
- "github.com/ava-labs/coreth/core/rawdb"
- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/core/vm"
- "github.com/ava-labs/coreth/params"
+ "github.com/ethereum/go-ethereum/common"
+ "github.com/ethereum/go-ethereum/ethdb"
+ "gitlab.com/flarenetwork/coreth/consensus/dummy"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
+ "gitlab.com/flarenetwork/coreth/core/state"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/core/vm"
+ "gitlab.com/flarenetwork/coreth/params"
)

func TestArchiveBlockChain(t *testing.T) {
diff --git a/core/bloom_indexer.go b/core/bloom_indexer.go
index 07e50de..c2fa061 100644
--- a/core/bloom_indexer.go
+++ b/core/bloom_indexer.go
@@ -20,12 +20,12 @@ import (
    "context"
    "time"

- "github.com/ava-labs/coreth/core/bloombits"
- "github.com/ava-labs/coreth/core/rawdb"
- "github.com/ava-labs/coreth/core/types"
+ "github.com/ethereum/go-ethereum/common"
+ "github.com/ethereum/go-ethereum/common/bitutil"
+ "github.com/ethereum/go-ethereum/ethdb"
+ "gitlab.com/flarenetwork/coreth/core/bloombits"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
+ "gitlab.com/flarenetwork/coreth/core/types"
)

const (
diff --git a/core/bloombits/generator.go b/core/bloombits/generator.go
index c0422ca..23a5b54 100644
--- a/core/bloombits/generator.go
+++ b/core/bloombits/generator.go
@@ -29,7 +29,7 @@ package bloombits
import (
    "errors"

- "github.com/ava-labs/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/core/types"
)

```

```

var (
diff --git a/core/bloombits/generator_test.go b/core/bloombits/generator_test.go
index 27dba47..b233daf 100644
--- a/core/bloombits/generator_test.go
+++ b/core/bloombits/generator_test.go
@@ -31,7 +31,7 @@ import (
    "math/rand"
    "testing"

-    "github.com/ava-labs/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

// Tests that batched bloom bits are correctly rotated from the input bloom
diff --git a/core/chain_indexer.go b/core/chain_indexer.go
index ee6557f..eaf7881 100644
--- a/core/chain_indexer.go
+++ b/core/chain_indexer.go
@@ -34,12 +34,12 @@ import (
    "sync/atomic"
    "time"

-    "github.com/ava-labs/coreth/core/rawdb"
-    "github.com/ava-labs/coreth/core/types"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/ethdb"
+    "github.com/ethereum/go-ethereum/event"
+    "github.com/ethereum/go-ethereum/log"
+    "gitlab.com/flarenetwork/coreth/core/rawdb"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

// ChainIndexerBackend defines the methods needed to process chain segments in
diff --git a/core/chain_indexer_test.go b/core/chain_indexer_test.go
index 3edf175..d8b1c43 100644
--- a/core/chain_indexer_test.go
+++ b/core/chain_indexer_test.go
@@ -35,9 +35,9 @@ import (
    "testing"
    "time"

-    "github.com/ava-labs/coreth/core/rawdb"
-    "github.com/ava-labs/coreth/core/types"
+    "github.com/ethereum/go-ethereum/common"
+    "gitlab.com/flarenetwork/coreth/core/rawdb"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

// Runs multiple tests with randomized parameters.
diff --git a/core/chain_makers.go b/core/chain_makers.go
index 4aca357..58fd71b 100644
--- a/core/chain_makers.go
+++ b/core/chain_makers.go
@@ -30,15 +30,15 @@ import (
    "fmt"
    "math/big"

-    "github.com/ava-labs/coreth/consensus"
-    "github.com/ava-labs/coreth/consensus/dummy"
-    "github.com/ava-labs/coreth/consensus/misc"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/ethdb"
+    "gitlab.com/flarenetwork/coreth/consensus"
+    "gitlab.com/flarenetwork/coreth/consensus/dummy"
+    "gitlab.com/flarenetwork/coreth/consensus/misc"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/params"
)

// BlockGen creates blocks for testing.
diff --git a/core/chain_makers_test.go b/core/chain_makers_test.go
index b67cac2..34881d4 100644
--- a/core/chain_makers_test.go
+++ b/core/chain_makers_test.go
@@ -30,13 +30,13 @@ import (
    "fmt"
    "math/big"

-    "github.com/ava-labs/coreth/consensus/dummy"
-    "github.com/ava-labs/coreth/core/rawdb"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/crypto"
+    "gitlab.com/flarenetwork/coreth/consensus/dummy"
+    "gitlab.com/flarenetwork/coreth/core/rawdb"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/params"
)

func ExampleGenerateChain() {
diff --git a/core/error.go b/core/error.go
index 0265448..4039ed7 100644
--- a/core/error.go
+++ b/core/error.go
@@ -29,7 +29,7 @@ package core
import (
    "errors"

-    "github.com/ava-labs/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

var (
diff --git a/core/events.go b/core/events.go
index 4898dbc..d57d378 100644
--- a/core/events.go
+++ b/core/events.go
@@ -27,8 +27,8 @@ package core
import (
-    "github.com/ava-labs/coreth/core/types"
+    "github.com/ethereum/go-ethereum/common"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

// NewTxEvent is posted when a batch of transactions enter the transaction pool.
diff --git a/core/evm.go b/core/evm.go
index d45f241..2dad5a4 100644
--- a/core/evm.go
+++ b/core/evm.go

```

```

@@ -29,10 +29,10 @@ package core
import (
    "math/big"

-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
    "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/consensus"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
    //"github.com/ethereum/go-ethereum/log"
)

diff --git a/core/gen_genesis.go b/core/gen_genesis.go
index a4ec8f5..b247996 100644
--- a/core/gen_genesis.go
+++ b/core/gen_genesis.go
@@ -7,10 +7,10 @@ import (
    "errors"
    "math/big"

-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/common/math"
+   "gitlab.com/flarenetwork/coreth/params"
)

var _ = (*genesisSpecMarshaling)(nil)
diff --git a/core/genesis.go b/core/genesis.go
index 185887e..153f51f 100644
--- a/core/genesis.go
+++ b/core/genesis.go
@@ -34,16 +34,16 @@ import (
    "fmt"
    "math/big"

-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/common/math"
    "github.com/ethereum/go-ethereum/ethdb"
    "github.com/ethereum/go-ethereum/log"
    "github.com/ethereum/go-ethereum/trie"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/params"
)

//go:generate gencodec -type Genesis -field-override genesisSpecMarshaling -out gen_genesis.go
diff --git a/core/headerchain.go b/core/headerchain.go
index eafc747..b8d75c1 100644
--- a/core/headerchain.go
+++ b/core/headerchain.go
@@ -33,13 +33,13 @@ import (
    mrand "math/rand"
    "sync/atomic"

-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/ethdb"
    lru "github.com/hashicorp/golang-lru"
+   "gitlab.com/flarenetwork/coreth/consensus"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/params"
)

const (
diff --git a/core/keeper.go b/core/keeper.go
new file mode 100644
index 0000000..abe3acc
--- /dev/null
+++ b/core/keeper.go
@@ -0,0 +1,149 @@
+// (c) 2021, Flare Networks Limited. All rights reserved.
+// Please see the file LICENSE for licensing terms.
+
+package core
+
+import (
+    "fmt"
+    "math/big"
+
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/log"
+
+    "gitlab.com/flarenetwork/coreth/core/vm"
+)
+
+// Define errors
+type ErrInvalidKeeperData struct{}
+
+func (e *ErrInvalidKeeperData) Error() string { return "invalid return data from keeper trigger" }
+
+type ErrKeeperDataEmpty struct{}
+
+func (e *ErrKeeperDataEmpty) Error() string { return "return data from keeper trigger empty" }
+
+type ErrMaxMintExceeded struct {
+    mintMax    *big.Int
+    mintRequest *big.Int
+}
+
+func (e *ErrMaxMintExceeded) Error() string {
+    return fmt.Sprintf("mint request of %s exceeded max of %s", e.mintRequest.Text(10), e.mintMax.Text(10))
+}
+
+type ErrMintNegative struct{}
+
+func (e *ErrMintNegative) Error() string { return "mint request cannot be negative" }
+
+// Define interface for dependencies
+type EVMCaller interface {
+    Call(caller vm.ContractRef, addr common.Address, input []byte, gas uint64, value *big.Int) (ret []byte, leftOverGas uint64, err error)
+    GetBlockNumber() *big.Int
+    GetGasLimit() uint64
+    AddBalance(addr common.Address, amount *big.Int)
+}
+
+// Define maximums that can change by block height
+func GetKeeperGasMultiplier(blockNumber *big.Int) uint64 {

```

```

+     switch {
+     default:
+         return 100
+     }
+ }
+
+func GetSystemTriggerContractAddr(blockNumber *big.Int) string {
+     switch {
+     default:
+         return "0x1000000000000000000000000000000000000000000000000000000000000002"
+     }
+ }
+
+func GetSystemTriggerSelector(blockNumber *big.Int) []byte {
+     switch {
+     default:
+         return []byte{0x7f, 0xec, 0x8d, 0x38}
+     }
+ }
+
+func GetPrioritisedFTSOContract(blockTime *big.Int) string {
+     switch {
+     default:
+         return "0x1000000000000000000000000000000000000000000000000000000000000003"
+     }
+ }
+
+func GetMaximumMintRequest(blockNumber *big.Int) *big.Int {
+     switch {
+     default:
+         maxRequest, _ := new(big.Int).SetString("5000000000000000000000000000", 10)
+         return maxRequest
+     }
+ }
+
+func triggerKeeper(evm EVMCaller) (*big.Int, error) {
+     bigZero := big.NewInt(0)
+     // Get the contract to call
+     systemTriggerContract := common.HexToAddress(GetSystemTriggerContractAddr(evm.GetBlockNumber()))
+     // Call the method
+     triggerRet, _ := evm.Call(
+         vm.AccountRef(systemTriggerContract),
+         systemTriggerContract,
+         GetSystemTriggerSelector(evm.GetBlockNumber()),
+         GetKeeperGasMultiplier(evm.GetBlockNumber())*evm.GetGasLimit(),
+         bigZero)
+     // If no error and a value came back...
+     if triggerErr == nil && triggerRet != nil {
+         // Did we get one big int?
+         if len(triggerRet) == 32 {
+             // Convert to big int
+             // Mint request cannot be less than 0 as SetBytes treats value as unsigned
+             mintRequest := new(big.Int).SetBytes(triggerRet)
+             // return the mint request
+             return mintRequest, nil
+         } else {
+             // Returned length was not 32 bytes
+             return bigZero, &ErrInvalidKeeperData{}
+         }
+     } else {
+         if triggerErr != nil {
+             return bigZero, triggerErr
+         } else {
+             return bigZero, &ErrKeeperDataEmpty{}
+         }
+     }
+ }
+
+func mint(evm EVMCaller, mintRequest *big.Int) error {
+     // If the mint request is greater than zero and less than max
+     max := GetMaximumMintRequest(evm.GetBlockNumber())
+     if mintRequest.Cmp(big.NewInt(0)) > 0 &&
+         mintRequest.Cmp(max) <= 0 {
+         // Mint the amount asked for on to the keeper contract
+         evm.AddBalance(common.HexToAddress(GetSystemTriggerContractAddr(evm.GetBlockNumber()))), mintRequest)
+     } else if mintRequest.Cmp(max) > 0 {
+         // Return error
+         return &ErrMaxMintExceeded{
+             mintRequest: mintRequest,
+             mintMax:      max,
+         }
+     } else if mintRequest.Cmp(big.NewInt(0)) < 0 {
+         // Cannot mint negatives
+         return &ErrMintNegative{}
+     }
+     // No error
+     return nil
+ }
+
+func triggerKeeperAndMint(evm EVMCaller, log log.Logger) {
+     // Call the keeper
+     mintRequest, triggerErr := triggerKeeper(evm)
+     // If no error...
+     if triggerErr == nil {
+         // time to mint
+         if mintError := mint(evm, mintRequest); mintError != nil {
+             log.Warn("Error minting inflation request", "error", mintError)
+         }
+     } else {
+         log.Warn("Keeper trigger in error", "error", triggerErr)
+     }
+ }

```

```

diff --git a/core/keeper_test.go b/core/keeper_test.go
new file mode 100644
index 0000000..10fff7c
--- /dev/null
+++ b/core/keeper_test.go
@@ -0,0 +1,451 @@

```

```

// (c) 2021, Flare Networks Limited. All rights reserved.
// Please see the file LICENSE for licensing terms.

```

```

+package core
+
+import (
+     "errors"
+     "math/big"
+     "testing"
+
+     "github.com/ethereum/go-ethereum/common"
+     "github.com/ethereum/go-ethereum/log"
+
+     "gitlab.com/flarenetwork/coreth/core/vm"
+)

```

```

+// Define a mock structure to spy and mock values for keeper calls
+type MockEVMCallerData struct {
+     callCalls      int
+     addBalanceCalls int
+     blockNumber    big.Int
+     gasLimit       uint64

```



```

"google.org/x/crypto/sha3"
)

diff --git a/core/rawdb/accessors_metadata.go b/core/rawdb/accessors_metadata.go
index 5b39253..47b9e9d 100644
--- a/core/rawdb/accessors_metadata.go
+++ b/core/rawdb/accessors_metadata.go
@@ -29,11 +29,11 @@ package rawdb
import (
    "encoding/json"

-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "github.com/ethereum/go-ethereum/log"
+   "github.com/ethereum/go-ethereum/rlp"
+   "gitlab.com/flarenetwork/coreth/params"
)

// ReadDatabaseVersion retrieves the version number of the database.
diff --git a/core/state/database.go b/core/state/database.go
index f4af1a0..feba572 100644
--- a/core/state/database.go
+++ b/core/state/database.go
@@ -31,11 +31,11 @@ import (
    "fmt"

+   "github.com/VictoriaMetrics/fastcache"
-   "github.com/ava-labs/coreth/core/rawdb"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "github.com/ethereum/go-ethereum/trie"
+   lru "github.com/hashicorp/golang-lru"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
)

const (
diff --git a/core/state/snapshot/conversion.go b/core/state/snapshot/conversion.go
index 0fd4e9b..d2b519f 100644
--- a/core/state/snapshot/conversion.go
+++ b/core/state/snapshot/conversion.go
@@ -36,12 +36,12 @@ import (
    "sync"
    "time"

-   "github.com/ava-labs/coreth/core/rawdb"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "github.com/ethereum/go-ethereum/log"
+   "github.com/ethereum/go-ethereum/rlp"
+   "github.com/ethereum/go-ethereum/trie"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// trieKV represents a trie key-value pair
diff --git a/core/state/snapshot/disklayer.go b/core/state/snapshot/disklayer.go
index 106c451..c33f4a6 100644
--- a/core/state/snapshot/disklayer.go
+++ b/core/state/snapshot/disklayer.go
@@ -32,11 +32,11 @@ import (
    "time"

+   "github.com/VictoriaMetrics/fastcache"
-   "github.com/ava-labs/coreth/core/rawdb"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "github.com/ethereum/go-ethereum/rlp"
+   "github.com/ethereum/go-ethereum/trie"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// diskLayer is a low level persistent snapshot built on top of a key-value store.
diff --git a/core/state/snapshot/disklayer_test.go b/core/state/snapshot/disklayer_test.go
index f423c9a..9d758be 100644
--- a/core/state/snapshot/disklayer_test.go
+++ b/core/state/snapshot/disklayer_test.go
@@ -32,12 +32,12 @@ import (
    "os"
    "testing"

-   "github.com/ava-labs/coreth/core/rawdb"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "github.com/ethereum/go-ethereum/ethdb/leveldb"
+   "github.com/ethereum/go-ethereum/ethdb/memorydb"
+   "github.com/ethereum/go-ethereum/rlp"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// reverse reverses the contents of a byte slice. It's used to update random accs
diff --git a/core/state/snapshot/generate.go b/core/state/snapshot/generate.go
index 45f927f..3a48d1f 100644
--- a/core/state/snapshot/generate.go
+++ b/core/state/snapshot/generate.go
@@ -34,7 +34,6 @@ import (
    "time"

+   "github.com/VictoriaMetrics/fastcache"
-   "github.com/ava-labs/coreth/core/rawdb"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/math"
+   "github.com/ethereum/go-ethereum/crypto"
@@ -42,6 +41,7 @@ import (
    "github.com/ethereum/go-ethereum/log"
    "github.com/ethereum/go-ethereum/rlp"
    "github.com/ethereum/go-ethereum/trie"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
)

var (
diff --git a/core/state/snapshot/iterator.go b/core/state/snapshot/iterator.go
index 7a5da6a..2c34768 100644
--- a/core/state/snapshot/iterator.go
+++ b/core/state/snapshot/iterator.go
@@ -31,9 +31,9 @@ import (
    "fmt"
    "sort"

-   "github.com/ava-labs/coreth/core/rawdb"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// Iterator is an iterator to step over all the accounts or the specific
diff --git a/core/state/snapshot/iterator_test.go b/core/state/snapshot/iterator_test.go
index 9db744..1916c49 100644
--- a/core/state/snapshot/iterator_test.go
+++ b/core/state/snapshot/iterator_test.go
@@ -33,8 +33,8 @@ import (
    "time"
)

```

```

"math/rand"
"testing"

- "github.com/ava-labs/coreth/core/rawdb"
"github.com/ethereum/go-ethereum/common"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// TestAccountIteratorBasics tests some simple single-layer(diff and disk) iteration
diff --git a/core/state/snapshot/journal.go b/core/state/snapshot/journal.go
index 145f467..96c7c2e 100644
--- a/core/state/snapshot/journal.go
+++ b/core/state/snapshot/journal.go
@@ -33,12 +33,12 @@ import (
    "time"

- "github.com/VictoriaMetrics/fastcache"
- "github.com/ava-labs/coreth/core/rawdb"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/ethdb"
"github.com/ethereum/go-ethereum/log"
"github.com/ethereum/go-ethereum/rlp"
"github.com/ethereum/go-ethereum/trie"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// journalGenerator is a disk layer entry containing the generator progress marker.
diff --git a/core/state/snapshot/snapshot.go b/core/state/snapshot/snapshot.go
index bdbda6b..e311d69 100644
--- a/core/state/snapshot/snapshot.go
+++ b/core/state/snapshot/snapshot.go
@@ -36,12 +36,12 @@ import (
    "time"

- "github.com/VictoriaMetrics/fastcache"
- "github.com/ava-labs/coreth/core/rawdb"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/ethdb"
"github.com/ethereum/go-ethereum/log"
"github.com/ethereum/go-ethereum/metrics"
"github.com/ethereum/go-ethereum/trie"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
)

const (
diff --git a/core/state/snapshot/snapshot_test.go b/core/state/snapshot/snapshot_test.go
index c28dafa..da5cd63 100644
--- a/core/state/snapshot/snapshot_test.go
+++ b/core/state/snapshot/snapshot_test.go
@@ -32,9 +32,9 @@ import (
    "math/rand"
    "testing"

- "github.com/ava-labs/coreth/core/rawdb"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/rlp"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// randomHash generates a random blob of data and returns it as a hash.
diff --git a/core/state/snapshot/wipe.go b/core/state/snapshot/wipe.go
index calf7e0..3cbf754 100644
--- a/core/state/snapshot/wipe.go
+++ b/core/state/snapshot/wipe.go
@@ -30,10 +30,10 @@ import (
    "bytes"
    "time"

- "github.com/ava-labs/coreth/core/rawdb"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/ethdb"
"github.com/ethereum/go-ethereum/log"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// wipeSnapshot starts a goroutine to iterate over the entire key-value database
diff --git a/core/state/snapshot/wipe_test.go b/core/state/snapshot/wipe_test.go
index 952370d..ba4ce69 100644
--- a/core/state/snapshot/wipe_test.go
+++ b/core/state/snapshot/wipe_test.go
@@ -30,9 +30,9 @@ import (
    "math/rand"
    "testing"

- "github.com/ava-labs/coreth/core/rawdb"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/ethdb/memorydb"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
)

// Tests that given a database with random data content, all parts of a snapshot
diff --git a/core/state/state_test.go b/core/state/state_test.go
index 849f661..ec66ccc 100644
--- a/core/state/state_test.go
+++ b/core/state/state_test.go
@@ -27,9 +27,9 @@ package state

import (
- "github.com/ava-labs/coreth/core/rawdb"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/ethdb"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
)

type stateTest struct {
diff --git a/core/state/statedb.go b/core/state/statedb.go
index acc779c..3fe062c 100644
--- a/core/state/statedb.go
+++ b/core/state/statedb.go
@@ -34,15 +34,15 @@ import (
    "sort"
    "time"

- "github.com/ava-labs/coreth/core/rawdb"
- "github.com/ava-labs/coreth/core/state/snapshot"
- "github.com/ava-labs/coreth/core/types"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/crypto"
"github.com/ethereum/go-ethereum/log"
"github.com/ethereum/go-ethereum/metrics"
"github.com/ethereum/go-ethereum/rlp"
"github.com/ethereum/go-ethereum/trie"
+ "gitlab.com/flarenetwork/coreth/core/rawdb"
+ "gitlab.com/flarenetwork/coreth/core/state/snapshot"
+ "gitlab.com/flarenetwork/coreth/core/types"
)

type revision struct {
diff --git a/core/state/statedb_test.go b/core/state/statedb_test.go

```

```

index 9c295f9..4841b6b 100644
--- a/core/state/statedb_test.go
+++ b/core/state/statedb_test.go
@@ -39,11 +39,11 @@ import (
    "testing"
    "testing/quick"

-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state/snapshot"
-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/crypto"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state/snapshot"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

// Tests that updating a state trie does not leak any database writes prior to
diff --git a/core/state_connector.go b/core/state_connector.go
new file mode 100644
index 0000000..db6665e
--- /dev/null
+++ b/core/state_connector.go
@@ -0,0 +1,731 @@
+// (c) 2021, Flare Networks Limited. All rights reserved.
+// Please see the file LICENSE for licensing terms.
+
+package core
+
+import (
+   "bytes"
+   "crypto/sha256"
+   "encoding/binary"
+   "encoding/hex"
+   "encoding/json"
+   "fmt"
+   "io/ioutil"
+   "math"
+   "math/big"
+   "net/http"
+   "os"
+   "strconv"
+   "strings"
+   "time"
+
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "github.com/ethereum/go-ethereum/crypto"
+)
+
+var (
+   testingChainID          = new(big.Int).SetUint64(16)
+   stateConnectorActivationTime = new(big.Int).SetUint64(1636070400)
+   tr                       = &http.Transport{
+       MaxIdleConns:    100,
+       MaxConnsPerHost: 100,
+       MaxIdleConnsPerHost: 100,
+       IdleConnTimeout: 60 * time.Second,
+       DisableCompression: true,
+   }
+   client = &http.Client{
+       Transport: tr,
+       Timeout:   5 * time.Second,
+   }
+   apiRetries    = 3
+   apiRetryDelay = 1 * time.Second
+)
+
+func GetStateConnectorActivated(chainID *big.Int, blockTime *big.Int) bool {
+   // Return true if chainID is 16 or if block.timestamp is greater than the state connector activation time on any chain
+   return chainID.Cmp(testingChainID) == 0 || blockTime.Cmp(stateConnectorActivationTime) > 0
+}
+
+func GetStateConnectorGasDivisor(blockTime *big.Int) uint64 {
+   switch {
+   default:
+       return 3
+   }
+}
+
+func GetMaxAllowedChains(blockTime *big.Int) uint32 {
+   switch {
+   default:
+       return 5
+   }
+}
+
+func GetStateConnectorContractAddr(blockTime *big.Int) string {
+   switch {
+   default:
+       return "0x1000000000000000000000000000000000000000000000000000000000000001"
+   }
+}
+
+func GetProveDataAvailabilityPeriodFinalitySelector(blockTime *big.Int) []byte {
+   switch {
+   default:
+       return []byte{0xc5, 0xd6, 0x4c, 0xd1}
+   }
+}
+
+func GetProvePaymentFinalitySelector(blockTime *big.Int) []byte {
+   switch {
+   default:
+       return []byte{0x38, 0x84, 0x92, 0xdd}
+   }
+}
+
+func GetDisprovePaymentFinalitySelector(blockTime *big.Int) []byte {
+   switch {
+   default:
+       return []byte{0x7f, 0x58, 0x24, 0x32}
+   }
+}
+
+// =====
+// Proof of Work Common
+// =====
+
+type GetPowRequestPayload struct {
+   Method string `json:"method"`
+   Params []string `json:"params"`
+}
+
+type GetPowBlockCountResp struct {
+   Result uint64 `json:"result"`
+   Error  interface{} `json:"error"`
+}
+
+func GetPowBlockCount(chainURL string, username string, password string) (uint64, bool) {
+   data := GetPowRequestPayload{

```

```

+         Method: "getblockcount",
+         Params: []string{},
+     }
+     payloadBytes, err := json.Marshal(data)
+     if err != nil {
+         return 0, true
+     }
+     body := bytes.NewReader(payloadBytes)
+     req, err := http.NewRequest("POST", chainURL, body)
+     if err != nil {
+         return 0, true
+     }
+     req.Header.Set("Content-Type", "application/json")
+     if username != "" && password != "" {
+         req.SetBasicAuth(username, password)
+     }
+     resp, err := client.Do(req)
+     if err != nil {
+         return 0, true
+     }
+     defer resp.Body.Close()
+     if resp.StatusCode != 200 {
+         return 0, true
+     }
+     respBody, err := ioutil.ReadAll(resp.Body)
+     if err != nil {
+         return 0, true
+     }
+     var jsonResp GetPoWBlockCountResp
+     err = json.Unmarshal(respBody, &jsonResp)
+     if err != nil {
+         return 0, true
+     }
+     if jsonResp.Error != nil {
+         return 0, true
+     }
+     return jsonResp.Result, false
+ }
+
+type GetPoWBlockHeaderResult struct {
+     Hash          string `json:"hash"`
+     Confirmations uint64 `json:"confirmations"`
+     Height        uint64 `json:"height"`
+ }
+
+type GetPoWBlockHeaderResp struct {
+     Result GetPoWBlockHeaderResult `json:"result"`
+     Error  interface{}                `json:"error"`
+ }
+
+func GetPoWBlockHeader(ledgerHash string, requiredConfirmations uint64, chainURL string, username string, password string) (uint64, bool) {
+     data := GetPoWRequestPayload{
+         Method: "getblockheader",
+         Params: []string{
+             ledgerHash,
+         },
+     }
+     payloadBytes, err := json.Marshal(data)
+     if err != nil {
+         return 0, true
+     }
+     body := bytes.NewReader(payloadBytes)
+     req, err := http.NewRequest("POST", chainURL, body)
+     if err != nil {
+         return 0, true
+     }
+     req.Header.Set("Content-Type", "application/json")
+     if username != "" && password != "" {
+         req.SetBasicAuth(username, password)
+     }
+     resp, err := client.Do(req)
+     if err != nil {
+         return 0, true
+     }
+     defer resp.Body.Close()
+     if resp.StatusCode != 200 {
+         return 0, true
+     }
+     respBody, err := ioutil.ReadAll(resp.Body)
+     if err != nil {
+         return 0, true
+     }
+     var jsonResp GetPoWBlockHeaderResp
+     err = json.Unmarshal(respBody, &jsonResp)
+     if err != nil {
+         return 0, true
+     }
+     if jsonResp.Error != nil {
+         return 0, false
+     } else if jsonResp.Result.Confirmations < requiredConfirmations {
+         return 0, false
+     }
+     return jsonResp.Result.Height, false
+ }
+
+func ProveDataAvailabilityPeriodFinalityPoW(checkRet []byte, chainURL string, username string, password string) (bool, bool) {
+     blockCount, err := GetPoWBlockCount(chainURL, username, password)
+     if err {
+         return false, true
+     }
+     ledger := binary.BigEndian.Uint64(checkRet[56:64])
+     requiredConfirmations := binary.BigEndian.Uint64(checkRet[88:96])
+     if blockCount < ledger+requiredConfirmations {
+         return false, true
+     }
+     ledgerResp, err := GetPoWBlockHeader(hex.EncodeToString(checkRet[96:128]), requiredConfirmations, chainURL, username, password)
+     if err {
+         return false, true
+     } else if ledgerResp > 0 && ledgerResp == ledger {
+         return true, false
+     } else {
+         return false, false
+     }
+ }
+
+type GetPoWTxRequestParams struct {
+     TxID    string `json:"txid"`
+     Verbose bool   `json:"verbose"`
+ }
+
+type GetPoWTxRequestPayload struct {
+     Method string `json:"method"`
+     Params GetPoWTxRequestParams `json:"params"`
+ }
+
+type GetPoWTxResult struct {
+     TxID          string `json:"txid"`
+     BlockHash     string `json:"blockhash"`
+     Confirmations uint64 `json:"confirmations"`
+     Vout          []struct {
+         Value float64 `json:"value"`
+         N     uint64 `json:"n"`
+         ScriptPubKey struct {

```

```

+         Type string `json:"type"`
+         Addresses []string `json:"addresses"`
+     } `json:"scriptPubKey"`
+ } `json:"vout"`
+)
+type GetPoWtxResp struct {
+    Result GetPoWtxResult `json:"result"`
+    Error interface{} `json:"error"`
+}
+
+func GetPoWtx(txHash string, voutN uint64, latestAvailableBlock uint64, currencyCode string, chainURL string, username string, password string) ([]byte, uint64, bool) {
+    data := GetPoWtxRequestPayload{
+        Method: "getrawtransaction",
+        Params: GetPoWtxRequestParams{
+            TxID: txHash[1:],
+            Verbose: true,
+        },
+    },
+
+    payloadBytes, err := json.Marshal(data)
+    if err != nil {
+        return []byte{}, 0, true
+    }
+    body := bytes.NewReader(payloadBytes)
+    req, err := http.NewRequest("POST", chainURL, body)
+    if err != nil {
+        return []byte{}, 0, true
+    }
+    req.Header.Set("Content-Type", "application/json")
+    if username != "" && password != "" {
+        req.SetBasicAuth(username, password)
+    }
+    resp, err := client.Do(req)
+    if err != nil {
+        return []byte{}, 0, true
+    }
+    defer resp.Body.Close()
+    if resp.StatusCode != 200 {
+        return []byte{}, 0, true
+    }
+    respBody, err := ioutil.ReadAll(resp.Body)
+    if err != nil {
+        return []byte{}, 0, true
+    }
+    var jsonResp GetPoWtxResp
+    err = json.Unmarshal(respBody, &jsonResp)
+    if err != nil {
+        return []byte{}, 0, true
+    }
+    if jsonResp.Error != nil {
+        return []byte{}, 0, true
+    }
+    if uint64(len(jsonResp.Result.Vout)) <= voutN {
+        return []byte{}, 0, false
+    }
+    if jsonResp.Result.Vout[voutN].ScriptPubKey.Type != "pubkeyhash" || len(jsonResp.Result.Vout[voutN].ScriptPubKey.Addresses) != 1 {
+        return []byte{}, 0, false
+    }
+    inBlock, getBlockErr := GetPoWBlockHeader(jsonResp.Result.BlockHash, jsonResp.Result.Confirmations, chainURL, username, password)
+    if getBlockErr {
+        return []byte{}, 0, true
+    }
+    if inBlock == 0 || inBlock >= latestAvailableBlock {
+        return []byte{}, 0, false
+    }
+    txIdHash := crypto.Keccak256([]byte(txHash))
+    destinationHash := crypto.Keccak256([]byte(jsonResp.Result.Vout[voutN].ScriptPubKey.Addresses[0]))
+    amountHash := crypto.Keccak256(common.LeftPadBytes(common.FromHex(hexutil.EncodeUint64(uint64(jsonResp.Result.Vout[voutN].Value*math.Pow(10, 8))))), 32))
+    currencyHash := crypto.Keccak256([]byte(currencyCode))
+    return crypto.Keccak256(txIdHash, destinationHash, amountHash, currencyHash), inBlock, false
+}
+
+func ProvePaymentFinalityPoW(checkRet []byte, isDisprove bool, currencyCode string, chainURL string, username string, password string) (bool, bool) {
+    if len(checkRet) < 257 {
+        return false, false
+    }
+    voutN, err := strconv.ParseUint(string(checkRet[192:193]), 16, 64)
+    if err != nil {
+        return false, false
+    }
+    paymentHash, inBlock, getPoWtxErr := GetPoWtx(string(checkRet[192:257]), voutN, binary.BigEndian.Uint64(checkRet[88:96]), currencyCode, chainURL, username, password)
+    if getPoWtxErr {
+        return false, true
+    }
+    if !isDisprove {
+        if len(paymentHash) > 0 && bytes.Equal(paymentHash, checkRet[96:128]) && inBlock == binary.BigEndian.Uint64(checkRet[56:64]) {
+            return true, false
+        }
+    } else {
+        if len(paymentHash) > 0 && bytes.Equal(paymentHash, checkRet[96:128]) && inBlock > binary.BigEndian.Uint64(checkRet[56:64]) {
+            return true, false
+        } else if len(paymentHash) == 0 {
+            return true, false
+        }
+    }
+    return false, false
+}
+
+func ProvePoW(sender common.Address, blockTime *big.Int, functionSelector []byte, checkRet []byte, currencyCode string, chainURL string) (bool, bool) {
+    var username, password string
+    chainURLhash := sha256.Sum256([]byte(chainURL))
+    chainURLchecksum := hex.EncodeToString(chainURLhash[0:4])
+    switch currencyCode {
+    case "btc":
+        username = os.Getenv("BTC_U_" + chainURLchecksum)
+        password = os.Getenv("BTC_P_" + chainURLchecksum)
+    case "ltc":
+        username = os.Getenv("LTC_U_" + chainURLchecksum)
+        password = os.Getenv("LTC_P_" + chainURLchecksum)
+    case "dog":
+        username = os.Getenv("DOGE_U_" + chainURLchecksum)
+        password = os.Getenv("DOGE_P_" + chainURLchecksum)
+    }
+    if bytes.Equal(functionSelector, GetProveDataAvailabilityPeriodFinalitySelector(blockTime)) {
+        return ProveDataAvailabilityPeriodFinalityPoW(checkRet, chainURL, username, password)
+    } else if bytes.Equal(functionSelector, GetProvePaymentFinalitySelector(blockTime)) {
+        return ProvePaymentFinalityPoW(checkRet, false, currencyCode, chainURL, username, password)
+    } else if bytes.Equal(functionSelector, GetDisprovePaymentFinalitySelector(blockTime)) {
+        return ProvePaymentFinalityPoW(checkRet, true, currencyCode, chainURL, username, password)
+    }
+    return false, false
+}
+
+// =====
+// XRP
+// =====
+
+type GetXRPBlockRequestParams struct {
+    LedgerIndex uint64 `json:"ledger_index"`
+    Full bool `json:"full"`
+    Accounts bool `json:"accounts"`
+}

```

```

+ Transactions bool `json:"transactions"`
+ Expand bool `json:"expand"`
+ OwnerFunds bool `json:"owner_funds"`
+}
+type GetXRPBlockRequestPayload struct {
+ Method string `json:"method"`
+ Params []GetXRPBlockRequestParams `json:"params"`
+}
+type CheckXRPErrResponse struct {
+ Error string `json:"error"`
+}
+type GetXRPBlockResponse struct {
+ LedgerHash string `json:"ledger_hash"`
+ LedgerIndex int `json:"ledger_index"`
+ Validated bool `json:"validated"`
+}
+
+func GetXRPBlock(ledger uint64, chainURL string) (string, bool) {
+ data := GetXRPBlockRequestPayload{
+ Method: "ledger",
+ Params: []GetXRPBlockRequestParams{
+ {
+ LedgerIndex: ledger,
+ Full: false,
+ Accounts: false,
+ Transactions: false,
+ Expand: false,
+ OwnerFunds: false,
+ },
+ },
+ }
+ payloadBytes, err := json.Marshal(data)
+ if err != nil {
+ return "", true
+ }
+ body := bytes.NewReader(payloadBytes)
+ req, err := http.NewRequest("POST", chainURL, body)
+ if err != nil {
+ return "", true
+ }
+ req.Header.Set("Content-Type", "application/json")
+ resp, err := client.Do(req)
+ if err != nil {
+ return "", true
+ }
+ defer resp.Body.Close()
+ if resp.StatusCode != 200 {
+ return "", true
+ }
+ respBody, err := ioutil.ReadAll(resp.Body)
+ if err != nil {
+ return "", true
+ }
+ var checkErrorResp map[string]CheckXRPErrResponse
+ err = json.Unmarshal(respBody, &checkErrorResp)
+ if err != nil {
+ return "", true
+ }
+ if checkErrorResp["result"].Error != "" {
+ return "", true
+ }
+ var jsonResp map[string]GetXRPBlockResponse
+ err = json.Unmarshal(respBody, &jsonResp)
+ if err != nil {
+ return "", true
+ }
+ if !jsonResp["result"].Validated {
+ return "", true
+ }
+ return jsonResp["result"].LedgerHash, false
+}
+
+func ProveDataAvailabilityPeriodFinalityXRP(checkRet []byte, chainURL string) (bool, bool) {
+ ledger := binary.BigEndian.Uint64(checkRet[56:64])
+ ledgerHashString, err := GetXRPBlock(ledger, chainURL)
+ if err {
+ return false, true
+ }
+ if ledgerHashString != "" && bytes.Equal(crypto.Keccak256([]byte(ledgerHashString)), checkRet[96:128]) {
+ return true, false
+ }
+ return false, false
+}
+
+type GetXRPTxRequestParams struct {
+ Transaction string `json:"transaction"`
+ Binary bool `json:"binary"`
+}
+
+type GetXRPTxRequestPayload struct {
+ Method string `json:"method"`
+ Params []GetXRPTxRequestParams `json:"params"`
+}
+
+type GetXRPTxResponse struct {
+ Destination string `json:"Destination"`
+ DestinationTag int `json:"DestinationTag"`
+ TransactionType string `json:"TransactionType"`
+ Hash string `json:"hash"`
+ InLedger int `json:"inLedger"`
+ Validated bool `json:"validated"`
+ Meta struct {
+ TransactionResult string `json:"TransactionResult"`
+ Amount interface{} `json:"delivered_amount"`
+ } `json:"meta"`
+}
+
+type GetXRPTxIssuedCurrency struct {
+ Currency string `json:"currency"`
+ Issuer string `json:"issuer"`
+ Value string `json:"value"`
+}
+
+func GetXRPTx(txHash string, latestAvailableLedger uint64, chainURL string) ([]byte, uint64, bool) {
+ data := GetXRPTxRequestPayload{
+ Method: "tx",
+ Params: []GetXRPTxRequestParams{
+ {
+ Transaction: txHash,
+ Binary: false,
+ },
+ },
+ }
+ payloadBytes, err := json.Marshal(data)
+ if err != nil {
+ return []byte{}, 0, true
+ }
+ body := bytes.NewReader(payloadBytes)
+ req, err := http.NewRequest("POST", chainURL, body)
+ if err != nil {
+ return []byte{}, 0, true
+ }
+ }

```

```

+ req.Header.Set("Content-Type", "application/json")
+ resp, err := client.Do(req)
+ if err != nil {
+     return []byte{}, 0, true
+ }
+ defer resp.Body.Close()
+ if resp.StatusCode != 200 {
+     return []byte{}, 0, true
+ }
+ respBody, err := ioutil.ReadAll(resp.Body)
+ if err != nil {
+     return []byte{}, 0, true
+ }
+ var checkErrorResp map[string]CheckXRPErrResponse
+ err = json.Unmarshal(respBody, &checkErrorResp)
+ if err != nil {
+     return []byte{}, 0, true
+ }
+ respErrString := checkErrorResp["result"].Error
+ if respErrString != "" {
+     if respErrString == "amendmentBlocked" ||
+         respErrString == "failedToForward" ||
+         respErrString == "invalid_API_version" ||
+         respErrString == "noClosed" ||
+         respErrString == "noCurrent" ||
+         respErrString == "noNetwork" ||
+         respErrString == "tooBusy" {
+         return []byte{}, 0, true
+     } else {
+         return []byte{}, 0, false
+     }
+ }
+ var jsonResp map[string]GetXRPTXResponse
+ err = json.Unmarshal(respBody, &jsonResp)
+ if err != nil {
+     return []byte{}, 0, false
+ }
+ if jsonResp["result"].TransactionType != "Payment" || !jsonResp["result"].Validated || jsonResp["result"].Meta.TransactionResult != "tesSUCCESS" {
+     return []byte{}, 0, false
+ }
+ inLedger := uint64(jsonResp["result"].InLedger)
+ if inLedger == 0 || inLedger >= latestAvailableLedger || !jsonResp["result"].Validated {
+     return []byte{}, 0, false
+ }
+ var currency string
+ var amount uint64
+ if stringAmount, ok := jsonResp["result"].Meta.Amount.(string); ok {
+     amount, err = strconv.ParseUint(stringAmount, 10, 64)
+     if err != nil {
+         return []byte{}, 0, false
+     }
+     currency = "xrp"
+ } else {
+     amountStruct, err := json.Marshal(jsonResp["result"].Meta.Amount)
+     if err != nil {
+         return []byte{}, 0, false
+     }
+     var issuedCurrencyResp GetXRPTXIssuedCurrency
+     err = json.Unmarshal(amountStruct, &issuedCurrencyResp)
+     if err != nil {
+         return []byte{}, 0, false
+     }
+     floatAmount, err := strconv.ParseFloat(issuedCurrencyResp.Value, 64)
+     if err != nil {
+         return []byte{}, 0, false
+     }
+     amount = uint64(floatAmount * math.Pow(10, 15))
+     currency = issuedCurrencyResp.Currency + issuedCurrencyResp.Issuer
+ }
+ txIdHash := crypto.Keccak256([]byte(jsonResp["result"].Hash))
+ destinationHash := crypto.Keccak256([]byte(jsonResp["result"].Destination))
+ destinationTagHash := crypto.Keccak256(common.LeftPadBytes(common.FromHex(hexutil.EncodeUint64(uint64(jsonResp["result"].DestinationTag))), 32))
+ destinationHash = crypto.Keccak256(destinationHash, destinationTagHash)
+ amountHash := crypto.Keccak256(common.LeftPadBytes(common.FromHex(hexutil.EncodeUint64(amount)), 32))
+ currencyHash := crypto.Keccak256([]byte(currency))
+ return crypto.Keccak256(txIdHash, destinationHash, amountHash, currencyHash), inLedger, false
+}
+
+func ProvePaymentFinalityXRP(checkRet []byte, isDisprove bool, chainURL string) (bool, bool) {
+    paymentHash, inLedger, err := GetXRPTx(string(checkRet[192:]), binary.BigEndian.Uint64(checkRet[88:96]), chainURL)
+    if err {
+        return false, true
+    }
+    if !isDisprove {
+        if len(paymentHash) > 0 && bytes.Equal(paymentHash, checkRet[96:128]) && inLedger == binary.BigEndian.Uint64(checkRet[56:64]) {
+            return true, false
+        }
+    } else {
+        if len(paymentHash) > 0 && bytes.Equal(paymentHash, checkRet[96:128]) && inLedger > binary.BigEndian.Uint64(checkRet[56:64]) {
+            return true, false
+        } else if len(paymentHash) == 0 {
+            return true, false
+        }
+    }
+    return false, false
+}
+
+func ProveXRP(sender common.Address, blockTime *big.Int, functionSelector []byte, checkRet []byte, chainURL string) (bool, bool) {
+    if bytes.Equal(functionSelector, GetProveDataAvailabilityPeriodFinalitySelector(blockTime)) {
+        return ProveDataAvailabilityPeriodFinalityXRP(checkRet, chainURL)
+    } else if bytes.Equal(functionSelector, GetProvePaymentFinalitySelector(blockTime)) {
+        return ProvePaymentFinalityXRP(checkRet, false, chainURL)
+    } else if bytes.Equal(functionSelector, GetDisprovePaymentFinalitySelector(blockTime)) {
+        return ProvePaymentFinalityXRP(checkRet, true, chainURL)
+    }
+    return false, false
+}
+
+// =====
+// ALGO
+// =====
+func ProveALGO(sender common.Address, blockTime *big.Int, functionSelector []byte, checkRet []byte, chainURL string) (bool, bool) {
+    return false, false
+}
+
+// =====
+// Common
+// =====
+func ProveChain(sender common.Address, blockTime *big.Int, functionSelector []byte, checkRet []byte, chainId uint32, chainURL string) (bool, bool) {
+    switch chainId {
+    case 0:
+        return ProvePoW(sender, blockTime, functionSelector, checkRet, "btc", chainURL)
+    case 1:
+        return ProvePoW(sender, blockTime, functionSelector, checkRet, "ltc", chainURL)
+    case 2:
+        return ProvePoW(sender, blockTime, functionSelector, checkRet, "dog", chainURL)
+    case 3:
+        return ProveXRP(sender, blockTime, functionSelector, checkRet, chainURL)
+    }
+}

```



```

"github.com/ethereum/go-ethereum/common"
"github.com/stretchr/testify/assert"
diff --git a/core/state_prefetcher.go b/core/state_prefetcher.go
index a1e0cde..f0fd973 100644
--- a/core/state_prefetcher.go
+++ b/core/state_prefetcher.go
@@ -30,11 +30,11 @@ import (
    "math/big"
    "sync/atomic"

-    "github.com/ava-labs/coreth/consensus"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/params"
+    "gitlab.com/flarenetwork/coreth/consensus"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/params"
)

// statePrefetcher is a basic Prefetcher, which blindly executes a block on top
diff --git a/core/state_processor.go b/core/state_processor.go
index b9c243f..ec6d709 100644
--- a/core/state_processor.go
+++ b/core/state_processor.go
@@ -30,14 +30,14 @@ import (
    "fmt"
    "math/big"

-    "github.com/ava-labs/coreth/consensus"
-    "github.com/ava-labs/coreth/consensus/misc"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/crypto"
+    "gitlab.com/flarenetwork/coreth/consensus"
+    "gitlab.com/flarenetwork/coreth/consensus/misc"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/params"
)

// StateProcessor is a basic Processor, which takes care of transitioning
diff --git a/core/state_transition.go b/core/state_transition.go
index 381327c..876d39d 100644
--- a/core/state_transition.go
+++ b/core/state_transition.go
@@ -1,3 +1,11 @@
+// (c) 2021, Flare Networks Limited. All rights reserved.
+//
+// This file is a derived work, based on the avalanchego library whose original
+// notices appear below. It is distributed under a license compatible with the
+// licensing terms of the original code from which it is derived.
+// Please see the file LICENSE_AVALABS for licensing terms of the original work.
+// Please see the file LICENSE for licensing terms.
+//
+// (c) 2019-2020, Ava Labs, Inc.
+//
+// This file is a derived work, based on the go-ethereum library whose original
@@ -27,16 +35,19 @@ package core

import (
+    "bytes"
+    "encoding/binary"
+    "fmt"
+    "math"
+    "math/big"

    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/ethereum/go-ethereum/log"

-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/params"
)

var emptyCodeHash = crypto.Keccak256Hash(nil)
@@ -115,6 +126,23 @@ func (result *ExecutionResult) Return() []byte {
    return common.CopyBytes(result.ReturnData)
}

+// Implement the EVMCaller interface on the state transition structure; simply delegate the calls
+func (st *StateTransition) Call(caller vm.ContractRef, addr common.Address, input []byte, gas uint64, value *big.Int) (ret []byte, leftOverGas uint64, err error) {
+    return st.evm.Call(caller, addr, input, gas, value)
+}
+
+func (st *StateTransition) GetBlockNumber() *big.Int {
+    return st.evm.Context.BlockNumber
+}
+
+func (st *StateTransition) GetGasLimit() uint64 {
+    return st.evm.Context.GasLimit
+}
+
+func (st *StateTransition) AddBalance(addr common.Address, amount *big.Int) {
+    st.state.AddBalance(addr, amount)
+}
+
+// Revert returns the concrete revert reason if the execution is aborted by `REVERT`
+// opcode. Note the reason can be nil if no data supplied with revert opcode.
+func (result *ExecutionResult) Revert() []byte {
@@ -321,19 +349,91 @@ func (st *StateTransition) TransitionDb() (*ExecutionResult, error) {
    if rules := st.evm.ChainConfig().AvalancheRules(st.evm.Context.BlockNumber, st.evm.Context.Time); rules.IsApricotPhase2 {
        st.state.PrepareAccessList(msg.From(), msg.To(), vm.ActivePrecompiles(rules), msg.AccessList())
    }
+
+    var (
+        ret []byte
+        vmerr error // vm errors do not effect consensus and are therefore not assigned to err
+        ret []byte
+        vmerr error // vm errors do not affect consensus and are therefore not assigned to err
+        selectProveDataAvailabilityPeriodFinality bool
+        selectProvePaymentFinality bool
+        selectDisprovePaymentFinality bool
+        prioritisedFTSOContract bool
+    )
+
+    if contractCreation {
+        ret, _, st.gas, vmerr = st.evm.Create(sender, st.data, st.gas, st.value)

```

```

-     } else {
+
+     if st.evm.Context.Coinbase != common.HexToAddress("0x0100000000000000000000000000000000") {
+         return nil, fmt.Errorf("Invalid value for block.coinbase")
+     }
+     if st.msg.From() == common.HexToAddress("0x0100000000000000000000000000000000") ||
+         st.msg.From() == common.HexToAddress(GetStateConnectorContractAddr(st.evm.Context.Time)) ||
+         st.msg.From() == common.HexToAddress(GetSystemTriggerContractAddr(st.evm.Context.Time)) {
+         return nil, fmt.Errorf("Invalid sender")
+     }
+     burnAddress := st.evm.Context.Coinbase
+     if !contractCreation {
+         if *msg.To() == common.HexToAddress(GetStateConnectorContractAddr(st.evm.Context.Time)) && len(st.data) >= 4 {
+             selectProveDataAvailabilityPeriodFinality = bytes.Equal(st.data[0:4], GetProveDataAvailabilityPeriodFinalitySelector(st.evm.Context.Time))
+             selectProvePaymentFinality = bytes.Equal(st.data[0:4], GetProvePaymentFinalitySelector(st.evm.Context.Time))
+             selectDisprovePaymentFinality = bytes.Equal(st.data[0:4], GetDisprovePaymentFinalitySelector(st.evm.Context.Time))
+         } else {
+             prioritisedFTSOContract = *msg.To() == common.HexToAddress(GetPrioritisedFTSOContract(st.evm.Context.Time))
+         }
+     }
+
+     if selectProveDataAvailabilityPeriodFinality || selectProvePaymentFinality || selectDisprovePaymentFinality {
+         // Increment the nonce for the next transaction
+         st.state.SetNonce(msg.From(), st.state.GetNonce(sender.Address()+1)
-         ret, st.gas, vmerr = st.evm.Call(sender, st.to(), st.data, st.gas, st.value)
+         stateConnectorGas := st.gas / GetStateConnectorGasDivisor(st.evm.Context.Time)
+         checkRet, _, checkVmerr := st.evm.Call(sender, st.to(), st.data, stateConnectorGas, st.value)
+         if checkVmerr == nil {
+             chainConfig := st.evm.ChainConfig()
+             if GetStateConnectorActivated(chainConfig.ChainID, st.evm.Context.Time) && binary.BigEndian.Uint32(checkRet[28:32]) < GetMaxAllowedChains(st.evm.Context.Time) {
+                 if StateConnectorCall(msg.From(), st.evm.Context.Time, st.data[0:4], checkRet) {
+                     originalCoinbase := st.evm.Context.Coinbase
+                     defer func() {
+                         st.evm.Context.Coinbase = originalCoinbase
+                     }()
+                     st.evm.Context.Coinbase = st.msg.From()
+                 }
+             }
+             ret, st.gas, vmerr = st.evm.Call(sender, st.to(), st.data, stateConnectorGas, st.value)
+         } else {
+             if contractCreation {
+                 ret, _, st.gas, vmerr = st.evm.Create(sender, st.data, st.gas, st.value)
+             } else {
+                 // Increment the nonce for the next transaction
+                 st.state.SetNonce(msg.From(), st.state.GetNonce(sender.Address()+1)
+                 ret, st.gas, vmerr = st.evm.Call(sender, st.to(), st.data, st.gas, st.value)
+             }
+         }
+     }
+     st.refundGas(apricotPhase1)
-     st.state.AddBalance(st.evm.Context.Coinbase, new(big.Int).Mul(new(big.Int).SetUint64(st.gasUsed()), st.gasPrice))
+     if vmerr == nil && prioritisedFTSOContract {
+         nominalGasUsed := uint64(21000)
+         nominalGasPrice := uint64(225_000_000_000)
+         nominalFee := new(big.Int).Mul(new(big.Int).SetUint64(nominalGasUsed), new(big.Int).SetUint64(nominalGasPrice))
+         actualGasUsed := st.gasUsed()
+         actualGasPrice := st.gasPrice
+         actualFee := new(big.Int).Mul(new(big.Int).SetUint64(actualGasUsed), actualGasPrice)
+         if actualFee.Cmp(nominalFee) > 0 {
+             feeRefund := new(big.Int).Sub(actualFee, nominalFee)
+             st.state.AddBalance(st.msg.From(), feeRefund)
+             st.state.AddBalance(burnAddress, nominalFee)
+         } else {
+             st.state.AddBalance(burnAddress, actualFee)
+         }
+     } else {
+         st.state.AddBalance(burnAddress, new(big.Int).Mul(new(big.Int).SetUint64(st.gasUsed()), st.gasPrice))
+     }
+
+     // Call the keeper contract trigger method if there is no vm error
+     if vmerr == nil {
+         // Temporarily disable EVM debugging
+         oldDebug := st.evm.Config.Debug
+         st.evm.Config.Debug = false
+         // Call the keeper contract trigger
+         log := log.Root()
+         triggerKeeperAndMint(st, log)
+         st.evm.Config.Debug = oldDebug
+     }
+
+     return &ExecutionResult{
+         UsedGas: st.gasUsed(),
diff --git a/core/test_blockchain.go b/core/test_blockchain.go
index 604ed0f..cfd2b9 100644
--- a/core/test_blockchain.go
+++ b/core/test_blockchain.go
@@ -8,13 +8,13 @@ import (
     "math/big"
     "testing"

-     "github.com/ava-labs/coreth/core/rawdb"
-     "github.com/ava-labs/coreth/core/state"
-     "github.com/ava-labs/coreth/core/types"
-     "github.com/ava-labs/coreth/params"
+     "github.com/ethereum/go-ethereum/common"
+     "github.com/ethereum/go-ethereum/crypto"
+     "github.com/ethereum/go-ethereum/ethdb"
+     "gitlab.com/flarenetwork/coreth/core/rawdb"
+     "gitlab.com/flarenetwork/coreth/core/state"
+     "gitlab.com/flarenetwork/coreth/core/types"
+     "gitlab.com/flarenetwork/coreth/params"
)

type ChainTest struct {
diff --git a/core/tx_cacher.go b/core/tx_cacher.go
index 86679ff..03099f2 100644
--- a/core/tx_cacher.go
+++ b/core/tx_cacher.go
@@ -29,7 +29,7 @@ package core
import (
    "runtime"

-     "github.com/ava-labs/coreth/core/types"
+     "gitlab.com/flarenetwork/coreth/core/types"
)

// senderCacher is a concurrent transaction sender recoverer and cacher.
diff --git a/core/tx_journal.go b/core/tx_journal.go
index b2bfa53..17b4419 100644
--- a/core/tx_journal.go
+++ b/core/tx_journal.go
@@ -31,10 +31,10 @@ import (
    "io"
    "os"

-     "github.com/ava-labs/coreth/core/types"
+     "github.com/ethereum/go-ethereum/common"
+     "github.com/ethereum/go-ethereum/log"
+     "github.com/ethereum/go-ethereum/rlp"
+     "gitlab.com/flarenetwork/coreth/core/types"
)

```

```

)
// errNoActiveJournal is returned if a transaction is attempted to be inserted
diff --git a/core/tx_list.go b/core/tx_list.go
index 6788bad..2e28237 100644
--- a/core/tx_list.go
+++ b/core/tx_list.go
@@ -33,8 +33,8 @@ import (
    "sort"
    "time"

-    "github.com/ava-labs/coreth/core/types"
+    "github.com/ethereum/go-ethereum/common"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

// nonceHeap is a heap.Interface implementation over 64bit unsigned integers for
diff --git a/core/tx_list_test.go b/core/tx_list_test.go
index 86cf79a..91e4d6e 100644
--- a/core/tx_list_test.go
+++ b/core/tx_list_test.go
@@ -31,8 +31,8 @@ import (
    "math/rand"
    "testing"

-    "github.com/ava-labs/coreth/core/types"
+    "github.com/ethereum/go-ethereum/crypto"
+    "gitlab.com/flarenetwork/coreth/core/types"
)

// Tests that transactions can be added to strict lists and list contents and
diff --git a/core/tx_noncer.go b/core/tx_noncer.go
index bb5968b..439b9c7 100644
--- a/core/tx_noncer.go
+++ b/core/tx_noncer.go
@@ -29,8 +29,8 @@ package core
import (
    "sync"

-    "github.com/ava-labs/coreth/core/state"
+    "github.com/ethereum/go-ethereum/common"
+    "gitlab.com/flarenetwork/coreth/core/state"
)

// txNoncer is a tiny virtual state database to manage the executable nonces of
diff --git a/core/tx_pool.go b/core/tx_pool.go
index 457be8f..9663b17 100644
--- a/core/tx_pool.go
+++ b/core/tx_pool.go
@@ -35,15 +35,15 @@ import (
    "sync"
    "time"

-    "github.com/ava-labs/coreth/consensus/dummy"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/common/prque"
+    "github.com/ethereum/go-ethereum/event"
+    "github.com/ethereum/go-ethereum/log"
+    "github.com/ethereum/go-ethereum/metrics"
+    "gitlab.com/flarenetwork/coreth/consensus/dummy"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/params"
)

const (
diff --git a/core/tx_pool_test.go b/core/tx_pool_test.go
index 84353e9..97e6c7e 100644
--- a/core/tx_pool_test.go
+++ b/core/tx_pool_test.go
@@ -29,14 +29,14 @@ import (
    "testing"
    "time"

-    "github.com/ava-labs/coreth/core/rawdb"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/crypto"
+    "github.com/ethereum/go-ethereum/event"
+    "github.com/ethereum/go-ethereum/trie"
+    "gitlab.com/flarenetwork/coreth/core/rawdb"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/params"
)

var (
diff --git a/core/types.go b/core/types.go
index 9607212..6a0d938 100644
--- a/core/types.go
+++ b/core/types.go
@@ -27,9 +27,9 @@ package core
import (
    "package core

import (
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
)

// Validator is an interface which defines the standard for block validation. It
diff --git a/core/types/block_test.go b/core/types/block_test.go
index e2f5623..85db341 100644
--- a/core/types/block_test.go
+++ b/core/types/block_test.go
@@ -33,11 +33,11 @@ import (
    "reflect"
    "testing"

-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/common/math"
+    "github.com/ethereum/go-ethereum/crypto"
+    "github.com/ethereum/go-ethereum/rlp"
+    "gitlab.com/flarenetwork/coreth/params"
+    "golang.org/x/crypto/sha3"
)

diff --git a/core/types/ hashing_test.go b/core/types/ hashing_test.go
index 424798d..e537e47 100644
--- a/core/types/ hashing_test.go
+++ b/core/types/ hashing_test.go

```

```

@@ -34,12 +34,12 @@ import (
    mrand "math/rand"
    "testing"

-   "github.com/ava-labs/coreth/core/types"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/ethereum/go-ethereum/rlp"
    "github.com/ethereum/go-ethereum/trie"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

func TestDeriveSha(t *testing.T) {
diff --git a/core/types/receipt.go b/core/types/receipt.go
index 6da7c15..90366de 100644
--- a/core/types/receipt.go
+++ b/core/types/receipt.go
@@ -34,11 +34,11 @@ import (
    "math/big"
    "unsafe"

-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/ethereum/go-ethereum/rlp"
+   "gitlab.com/flarenetwork/coreth/params"
)

//go:generate gencodec -type Receipt -field-override receiptMarshaling -out gen_receipt_json.go
diff --git a/core/types/receipt_test.go b/core/types/receipt_test.go
index 95fe68a..d2a2508 100644
--- a/core/types/receipt_test.go
+++ b/core/types/receipt_test.go
@@ -33,10 +33,10 @@ import (
    "reflect"
    "testing"

-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/ethereum/go-ethereum/rlp"
+   "gitlab.com/flarenetwork/coreth/params"
)

func TestDecodeEmptyTypedReceipt(t *testing.T) {
diff --git a/core/types/transaction_signing.go b/core/types/transaction_signing.go
index a717749..982d10d 100644
--- a/core/types/transaction_signing.go
+++ b/core/types/transaction_signing.go
@@ -32,9 +32,9 @@ import (
    "fmt"
    "math/big"

-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/crypto"
+   "gitlab.com/flarenetwork/coreth/params"
)

var ErrInvalidChainId = errors.New("invalid chain id for signer")
diff --git a/core/vm/access_list_tracer.go b/core/vm/access_list_tracer.go
index c481c54..22c8f3e 100644
--- a/core/vm/access_list_tracer.go
+++ b/core/vm/access_list_tracer.go
@@ -30,8 +30,8 @@ import (
    "math/big"
    "time"

-   "github.com/ava-labs/coreth/core/types"
    "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

// accessList is an accumulator for the set of accounts and storage slots an EVM
diff --git a/core/vm/contracts.go b/core/vm/contracts.go
index cfb2671..31b8d8f 100644
--- a/core/vm/contracts.go
+++ b/core/vm/contracts.go
@@ -32,13 +32,13 @@ import (
    "errors"
    "math/big"

-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/math"
    "github.com/ethereum/go-ethereum/crypto"
    "github.com/ethereum/go-ethereum/crypto/blake2b"
    "github.com/ethereum/go-ethereum/crypto/bls12381"
    "github.com/ethereum/go-ethereum/crypto/bn256"
+   "gitlab.com/flarenetwork/coreth/params"
)

//lint:ignore SA1019 Needed for precompile
"google.org/x/crypto/ripemd160"
diff --git a/core/vm/contracts_stateful.go b/core/vm/contracts_stateful.go
index 981ebd7..05b0361 100644
--- a/core/vm/contracts_stateful.go
+++ b/core/vm/contracts_stateful.go
@@ -7,9 +7,9 @@ import (
    "fmt"
    "math/big"

-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/holiman/uint256"
+   "gitlab.com/flarenetwork/coreth/params"
)

// PrecompiledContractsApricot contains the default set of pre-compiled Ethereum
diff --git a/core/vm/contracts_stateful_test.go b/core/vm/contracts_stateful_test.go
index 6126078..1278a67 100644
--- a/core/vm/contracts_stateful_test.go
+++ b/core/vm/contracts_stateful_test.go
@@ -7,12 +7,12 @@ import (
    "math/big"
    "testing"

-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/log"
    "github.com/ethereum/go-ethereum/stretchcr/testify/assert"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/params"
)

func TestPrecompiledContractSpendsGas(t *testing.T) {

```

```

diff --git a/core/vm/eips.go b/core/vm/eips.go
index e525a73..399a874 100644
--- a/core/vm/eips.go
+++ b/core/vm/eips.go
@@ -30,8 +30,8 @@ import (
    "fmt"
    "sort"

-   "github.com/ava-labs/coreth/params"
+   "github.com/holiman/uint256"
+   "gitlab.com/flarenetwork/coreth/params"
)

var activators = map[int]func(*JumpTable){
diff --git a/core/vm/evm.go b/core/vm/evm.go
index 9ad9db1..6f78cc6 100644
--- a/core/vm/evm.go
+++ b/core/vm/evm.go
@@ -31,10 +31,10 @@ import (
    "sync/atomic"
    "time"

-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/crypto"
+   "github.com/holiman/uint256"
+   "gitlab.com/flarenetwork/coreth/params"
)

// emptyCodeHash is used by create to ensure deployment is disallowed to already
diff --git a/core/vm/gas_table.go b/core/vm/gas_table.go
index 383fb6d..d611fc5 100644
--- a/core/vm/gas_table.go
+++ b/core/vm/gas_table.go
@@ -29,9 +29,9 @@ package vm
import (
    "errors"

-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/math"
+   "gitlab.com/flarenetwork/coreth/params"
)

// memoryGasCost calculates the quadratic gas for memory expansion. It does so
diff --git a/core/vm/gas_table_test.go b/core/vm/gas_table_test.go
index 92d5d30..2150bb2 100644
--- a/core/vm/gas_table_test.go
+++ b/core/vm/gas_table_test.go
@@ -31,11 +31,11 @@ import (
    "math/big"
    "testing"

-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/params"
)

func TestMemoryGasCost(t *testing.T) {
diff --git a/core/vm/instructions.go b/core/vm/instructions.go
index 81f3d3e..3fe1c4b 100644
--- a/core/vm/instructions.go
+++ b/core/vm/instructions.go
@@ -29,10 +29,10 @@ package vm
import (
    "errors"

-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/holiman/uint256"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/params"
+   "golang.org/x/crypto/sha3"
)

diff --git a/core/vm/instructions_test.go b/core/vm/instructions_test.go
index 1570b36..50fb6db 100644
--- a/core/vm/instructions_test.go
+++ b/core/vm/instructions_test.go
@@ -33,10 +33,10 @@ import (
    "io/ioutil"
    "testing"

-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/crypto"
+   "github.com/holiman/uint256"
+   "gitlab.com/flarenetwork/coreth/params"
)

type TwoOperandTestcase struct {
diff --git a/core/vm/interface.go b/core/vm/interface.go
index bde4b08..6148970 100644
--- a/core/vm/interface.go
+++ b/core/vm/interface.go
@@ -29,8 +29,8 @@ package vm
import (
    "math/big"

-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

// StateDB is an EVM database for full state querying.
diff --git a/core/vm/jump_table.go b/core/vm/jump_table.go
index d833e52..249736d 100644
--- a/core/vm/jump_table.go
+++ b/core/vm/jump_table.go
@@ -27,7 +27,7 @@ package vm
import (
-   "github.com/ava-labs/coreth/params"
+   "gitlab.com/flarenetwork/coreth/params"
)

type (
diff --git a/core/vm/logger.go b/core/vm/logger.go
index f8d088d..e49d4f7 100644
--- a/core/vm/logger.go
+++ b/core/vm/logger.go
@@ -34,12 +34,12 @@ import (
    "strings"
)

```

```

"time"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/common/math"
    "github.com/holiman/uint256"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/params"
)

// Storage represents a contract's storage.
diff --git a/core/vm/logger_test.go b/core/vm/logger_test.go
index 1d87e46..a35c4e6 100644
--- a/core/vm/logger_test.go
+++ b/core/vm/logger_test.go
@@ -30,10 +30,10 @@ import (
    "math/big"
    "testing"

-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/holiman/uint256"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/params"
)

type dummyContractRef struct {
diff --git a/core/vm/operations_acl.go b/core/vm/operations_acl.go
index adfe772..d9e2f06 100644
--- a/core/vm/operations_acl.go
+++ b/core/vm/operations_acl.go
@@ -29,9 +29,9 @@ package vm
import (
    "errors"

-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/math"
+   "gitlab.com/flarenetwork/coreth/params"
)

// gasSStoreEIP2929 implements gas cost for SSTORE according to EIP-2929
diff --git a/core/vm/runtime/env.go b/core/vm/runtime/env.go
index 5cae37d..6ebd9c6 100644
--- a/core/vm/runtime/env.go
+++ b/core/vm/runtime/env.go
@@ -27,8 +27,8 @@ package runtime

import (
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/vm"
)

func NewEnv(cfg *Config) *vm.EVM {
diff --git a/core/vm/runtime/runtime.go b/core/vm/runtime/runtime.go
index eb6e3f6..bd24dba 100644
--- a/core/vm/runtime/runtime.go
+++ b/core/vm/runtime/runtime.go
@@ -31,12 +31,12 @@ import (
    "math/big"
    "time"

-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/crypto"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/params"
)

// Config is a basic type specifying certain configuration flags for running
diff --git a/core/vm/runtime/runtime_example_test.go b/core/vm/runtime/runtime_example_test.go
index 9850e28..c126459 100644
--- a/core/vm/runtime/runtime_example_test.go
+++ b/core/vm/runtime/runtime_example_test.go
@@ -29,8 +29,8 @@ package runtime_test
import (
    "fmt"

-   "github.com/ava-labs/coreth/core/vm/runtime"
    "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/vm/runtime"
)

func ExampleExecute() {
diff --git a/core/vm/runtime/runtime_test.go b/core/vm/runtime/runtime_test.go
index 4b8d0a9..8561e31 100644
--- a/core/vm/runtime/runtime_test.go
+++ b/core/vm/runtime/runtime_test.go
@@ -34,16 +34,16 @@ import (
    "testing"
    "time"

-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/accounts/abi"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/core/asm"
+   "gitlab.com/flarenetwork/coreth/consensus"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/params"
)

func TestDefaults(t *testing.T) {
diff --git a/core/vm/stack_table.go b/core/vm/stack_table.go
index 487acae..e75f21a 100644
--- a/core/vm/stack_table.go
+++ b/core/vm/stack_table.go
@@ -27,7 +27,7 @@ package vm

```

```

import (
-   "github.com/ava-labs/coreth/params"
+   "gitlab.com/flarenetwork/coreth/params"
)

func minSwapStack(n int) int {
diff --git a/eth/api.go b/eth/api.go
index 62dd67b..f0d2bce 100644
--- a/eth/api.go
+++ b/eth/api.go
@@ -35,16 +35,16 @@ import (
    "os"
    "strings"

-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/internal/ethapi"
-   "github.com/ava-labs/coreth/rpc"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "github.com/ethereum/go-ethereum/rlp"
+   "github.com/ethereum/go-ethereum/trie"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/internal/ethapi"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

// PublicEthereumAPI provides an API to access Ethereum full node-related
diff --git a/eth/api_backend.go b/eth/api_backend.go
index 5152b20..29e81d9 100644
--- a/eth/api_backend.go
+++ b/eth/api_backend.go
@@ -32,21 +32,21 @@ import (
    "math/big"
    "time"

-   "github.com/ava-labs/coreth/accounts"
-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/bloombits"
-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/eth/gasprice"
-   "github.com/ava-labs/coreth/params"
-   "github.com/ava-labs/coreth/rpc"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/eth/downloader"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "github.com/ethereum/go-ethereum/event"
+   "gitlab.com/flarenetwork/coreth/accounts"
+   "gitlab.com/flarenetwork/coreth/consensus"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/bloombits"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/eth/gasprice"
+   "gitlab.com/flarenetwork/coreth/params"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

var (
diff --git a/eth/backend.go b/eth/backend.go
index 380548e..8c32ac2 100644
--- a/eth/backend.go
+++ b/eth/backend.go
@@ -33,28 +33,28 @@ import (
    "sync"
    "time"

-   "github.com/ava-labs/coreth/accounts"
-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/consensus/dummy"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/bloombits"
-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/eth/ethconfig"
-   "github.com/ava-labs/coreth/eth/filters"
-   "github.com/ava-labs/coreth/eth/gasprice"
-   "github.com/ava-labs/coreth/eth/tracers"
-   "github.com/ava-labs/coreth/internal/ethapi"
-   "github.com/ava-labs/coreth/miner"
-   "github.com/ava-labs/coreth/node"
-   "github.com/ava-labs/coreth/params"
-   "github.com/ava-labs/coreth/rpc"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/eth/downloader"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "github.com/ethereum/go-ethereum/event"
+   "github.com/ethereum/go-ethereum/log"
+   "gitlab.com/flarenetwork/coreth/accounts"
+   "gitlab.com/flarenetwork/coreth/consensus"
+   "gitlab.com/flarenetwork/coreth/consensus/dummy"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/bloombits"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/eth/ethconfig"
+   "gitlab.com/flarenetwork/coreth/eth/filters"
+   "gitlab.com/flarenetwork/coreth/eth/gasprice"
+   "gitlab.com/flarenetwork/coreth/eth/tracers"
+   "gitlab.com/flarenetwork/coreth/internal/ethapi"
+   "gitlab.com/flarenetwork/coreth/miner"
+   "gitlab.com/flarenetwork/coreth/node"
+   "gitlab.com/flarenetwork/coreth/params"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

// Config contains the configuration options of the ETH protocol.
diff --git a/eth/bloombits.go b/eth/bloombits.go
index ecc0aaf..b45ed5b 100644
--- a/eth/bloombits.go
+++ b/eth/bloombits.go
@@ -29,8 +29,8 @@ package eth
import (
    "time"

-   "github.com/ava-labs/coreth/core/rawdb"
+   "github.com/ethereum/go-ethereum/common/bitutil"

```

```

+     "gitlab.com/flarenetwork/coreth/core/rawdb"
+ )
const (
diff --git a/eth/ethconfig/config.go b/eth/ethconfig/config.go
index 99ea015..bbfa10b 100644
--- a/eth/ethconfig/config.go
+++ b/eth/ethconfig/config.go
@@ -29,10 +29,10 @@ package ethconfig
import (
    "time"

-     "github.com/ava-labs/coreth/core"
-     "github.com/ava-labs/coreth/eth/gasprice"
-     "github.com/ava-labs/coreth/miner"
+     "github.com/ethereum/go-ethereum/common"
+     "gitlab.com/flarenetwork/coreth/core"
+     "gitlab.com/flarenetwork/coreth/eth/gasprice"
+     "gitlab.com/flarenetwork/coreth/miner"
)

// DefaultFullGPOConfig contains default gasprice oracle settings for full node.
diff --git a/eth/filters/api.go b/eth/filters/api.go
index f543d6e..50339df 100644
--- a/eth/filters/api.go
+++ b/eth/filters/api.go
@@ -35,13 +35,13 @@ import (
    "sync"
    "time"

-     "github.com/ava-labs/coreth/core/types"
-     "github.com/ava-labs/coreth/interfaces"
-     "github.com/ava-labs/coreth/rpc"
+     "github.com/ethereum/go-ethereum/common"
+     "github.com/ethereum/go-ethereum/common/hexutil"
+     "github.com/ethereum/go-ethereum/ethdb"
+     "github.com/ethereum/go-ethereum/event"
+     "gitlab.com/flarenetwork/coreth/core/types"
+     "gitlab.com/flarenetwork/coreth/interfaces"
+     "gitlab.com/flarenetwork/coreth/rpc"
)

// filter is a helper struct that holds meta information over the filter type
diff --git a/eth/filters/api_test.go b/eth/filters/api_test.go
index 6f35639..2903c0b 100644
--- a/eth/filters/api_test.go
+++ b/eth/filters/api_test.go
@@ -21,8 +21,8 @@ import (
    "fmt"
    "testing"

-     "github.com/ava-labs/coreth/rpc"
+     "github.com/ethereum/go-ethereum/common"
+     "gitlab.com/flarenetwork/coreth/rpc"
)

func TestUnmarshalJSONNewFilterArgs(t *testing.T) {
diff --git a/eth/filters/filter.go b/eth/filters/filter.go
index 94769a1..e8f9ee7 100644
--- a/eth/filters/filter.go
+++ b/eth/filters/filter.go
@@ -32,15 +32,15 @@ import (
    "fmt"
    "math/big"

-     "github.com/ava-labs/coreth/core/vm"
+     "gitlab.com/flarenetwork/coreth/core/vm"

-     "github.com/ava-labs/coreth/core"
-     "github.com/ava-labs/coreth/core/bloombits"
-     "github.com/ava-labs/coreth/core/types"
-     "github.com/ava-labs/coreth/rpc"
+     "github.com/ethereum/go-ethereum/common"
+     "github.com/ethereum/go-ethereum/ethdb"
+     "github.com/ethereum/go-ethereum/event"
+     "gitlab.com/flarenetwork/coreth/core"
+     "gitlab.com/flarenetwork/coreth/core/bloombits"
+     "gitlab.com/flarenetwork/coreth/core/types"
+     "gitlab.com/flarenetwork/coreth/rpc"
)

type Backend interface {
diff --git a/eth/filters/filter_system.go b/eth/filters/filter_system.go
index 86f5a0b..db72584 100644
--- a/eth/filters/filter_system.go
+++ b/eth/filters/filter_system.go
@@ -34,14 +34,14 @@ import (
    "sync"
    "time"

-     "github.com/ava-labs/coreth/core"
-     "github.com/ava-labs/coreth/core/rawdb"
-     "github.com/ava-labs/coreth/core/types"
-     "github.com/ava-labs/coreth/interfaces"
-     "github.com/ava-labs/coreth/rpc"
+     "github.com/ethereum/go-ethereum/common"
+     "github.com/ethereum/go-ethereum/event"
+     "github.com/ethereum/go-ethereum/log"
+     "gitlab.com/flarenetwork/coreth/core"
+     "gitlab.com/flarenetwork/coreth/core/rawdb"
+     "gitlab.com/flarenetwork/coreth/core/types"
+     "gitlab.com/flarenetwork/coreth/interfaces"
+     "gitlab.com/flarenetwork/coreth/rpc"
)

// Type determines the kind of filter and is used to put the filter in to
diff --git a/eth/gasprice/gasprice.go b/eth/gasprice/gasprice.go
index b1d415b..954b124 100644
--- a/eth/gasprice/gasprice.go
+++ b/eth/gasprice/gasprice.go
@@ -33,12 +33,12 @@ import (
    "sync"

    "github.com/ava-labs/avalanchego/utils/timer"
-     "github.com/ava-labs/coreth/consensus/dummy"
-     "github.com/ava-labs/coreth/core/types"
-     "github.com/ava-labs/coreth/params"
-     "github.com/ava-labs/coreth/rpc"
+     "github.com/ethereum/go-ethereum/common"
+     "github.com/ethereum/go-ethereum/log"
+     "gitlab.com/flarenetwork/coreth/consensus/dummy"
+     "gitlab.com/flarenetwork/coreth/core/types"
+     "gitlab.com/flarenetwork/coreth/params"
+     "gitlab.com/flarenetwork/coreth/rpc"
)

const sampleNumber = 3 // Number of transactions sampled in a block
diff --git a/eth/gasprice/gasprice_test.go b/eth/gasprice/gasprice_test.go
index cfea2d4..97733eb 100644
--- a/eth/gasprice/gasprice_test.go

```

```

+++ b/eth/gasprice/gasprice_test.go
@@ -32,15 +32,15 @@ import (
    "math/big"
    "testing"

-    "github.com/ava-labs/coreth/consensus/dummy"
-    "github.com/ava-labs/coreth/core"
-    "github.com/ava-labs/coreth/core/rawdb"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/params"
-    "github.com/ava-labs/coreth/rpc"
-    "github.com/ethereum/go-ethereum/common"
-    "github.com/ethereum/go-ethereum/crypto"
+    "gitlab.com/flarenetwork/coreth/consensus/dummy"
+    "gitlab.com/flarenetwork/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core/rawdb"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/params"
+    "gitlab.com/flarenetwork/coreth/rpc"
)

type testBackend struct {
diff --git a/eth/state_accessor.go b/eth/state_accessor.go
index e94b2d4..adad3d1 100644
--- a/eth/state_accessor.go
+++ b/eth/state_accessor.go
@@ -32,13 +32,13 @@ import (
    "math/big"
    "time"

-    "github.com/ava-labs/coreth/core"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ethereum/go-ethereum/common"
-    "github.com/ethereum/go-ethereum/log"
-    "github.com/ethereum/go-ethereum/trie"
+    "gitlab.com/flarenetwork/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
)

// stateAtBlock retrieves the state database associated with a certain block.
diff --git a/eth/tracers/api.go b/eth/tracers/api.go
index c54cd93..46e7505 100644
--- a/eth/tracers/api.go
+++ b/eth/tracers/api.go
@@ -36,19 +36,19 @@ import (
    "sync"
    "time"

-    "github.com/ava-labs/coreth/consensus"
-    "github.com/ava-labs/coreth/core"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/internal/ethapi"
-    "github.com/ava-labs/coreth/params"
-    "github.com/ava-labs/coreth/rpc"
-    "github.com/ethereum/go-ethereum/common"
-    "github.com/ethereum/go-ethereum/common/hexutil"
-    "github.com/ethereum/go-ethereum/ethdb"
-    "github.com/ethereum/go-ethereum/log"
-    "github.com/ethereum/go-ethereum/rlp"
+    "gitlab.com/flarenetwork/coreth/consensus"
+    "gitlab.com/flarenetwork/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/internal/ethapi"
+    "gitlab.com/flarenetwork/coreth/params"
+    "gitlab.com/flarenetwork/coreth/rpc"
)

const (
diff --git a/eth/tracers/api_test.go b/eth/tracers/api_test.go
index 454f35c..4122c90 100644
--- a/eth/tracers/api_test.go
+++ b/eth/tracers/api_test.go
@@ -38,20 +38,20 @@ import (
    "sort"
    "testing"

-    "github.com/ava-labs/coreth/consensus"
-    "github.com/ava-labs/coreth/consensus/dummy"
-    "github.com/ava-labs/coreth/core"
-    "github.com/ava-labs/coreth/core/rawdb"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ava-labs/coreth/internal/ethapi"
-    "github.com/ava-labs/coreth/params"
-    "github.com/ava-labs/coreth/rpc"
-    "github.com/ethereum/go-ethereum/common"
-    "github.com/ethereum/go-ethereum/common/hexutil"
-    "github.com/ethereum/go-ethereum/crypto"
-    "github.com/ethereum/go-ethereum/ethdb"
+    "gitlab.com/flarenetwork/coreth/consensus"
+    "gitlab.com/flarenetwork/coreth/consensus/dummy"
+    "gitlab.com/flarenetwork/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core/rawdb"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/internal/ethapi"
+    "gitlab.com/flarenetwork/coreth/params"
+    "gitlab.com/flarenetwork/coreth/rpc"
)

var (
diff --git a/eth/tracers/tracer.go b/eth/tracers/tracer.go
index 3f4325a..4670281 100644
--- a/eth/tracers/tracer.go
+++ b/eth/tracers/tracer.go
@@ -35,12 +35,12 @@ import (
    "time"
    "unsafe"

-    "github.com/ava-labs/coreth/core"
-    "github.com/ava-labs/coreth/core/vm"
-    "github.com/ethereum/go-ethereum/common"
-    "github.com/ethereum/go-ethereum/common/hexutil"
-    "github.com/ethereum/go-ethereum/crypto"
-    "github.com/ethereum/go-ethereum/log"
+    "gitlab.com/flarenetwork/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gitlab.com/flarenetwork/coreth/core/vm"
+    "gopkg.in/olebedev/go-duktape.v3"
)

```

```

)
diff --git a/eth/tracers/tracer_test.go b/eth/tracers/tracer_test.go
index 3d4e94c..e8ce389 100644
--- a/eth/tracers/tracer_test.go
+++ b/eth/tracers/tracer_test.go
@@ -33,10 +33,10 @@ import (
    "testing"
    "time"

-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/params"
)

type account struct{}
diff --git a/eth/tracers/tracers.go b/eth/tracers/tracers.go
index dbe53f3..049cb18 100644
--- a/eth/tracers/tracers.go
+++ b/eth/tracers/tracers.go
@@ -31,7 +31,7 @@ import (
    "strings"
    "unicode"

-   "github.com/ava-labs/coreth/eth/tracers/internal/tracers"
+   "gitlab.com/flarenetwork/coreth/eth/tracers/internal/tracers"
)

// all contains all the built in JavaScript tracers by name.
diff --git a/eth/tracers/tracers_test.go b/eth/tracers/tracers_test.go
index f9e55e2..ded3c86 100644
--- a/eth/tracers/tracers_test.go
+++ b/eth/tracers/tracers_test.go
@@ -37,17 +37,17 @@ import (
    "strings"
    "testing"

-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/rawdb"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/params"
-   "github.com/ava-labs/coreth/tests"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "github.com/ethereum/go-ethereum/common/math"
+   "github.com/ethereum/go-ethereum/crypto"
+   "github.com/ethereum/go-ethereum/rlp"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/rawdb"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/params"
+   "gitlab.com/flarenetwork/coreth/tests"
)

// To generate a new callTracer test, copy paste the makeTest method below into
diff --git a/ethclient/corethclient/corethclient.go b/ethclient/corethclient/corethclient.go
index 8d7654f..da9ca7f 100644
--- a/ethclient/corethclient/corethclient.go
+++ b/ethclient/corethclient/corethclient.go
@@ -33,12 +33,12 @@ import (
    "runtime"
    "runtime/debug"

-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/ethclient"
-   "github.com/ava-labs/coreth/interfaces"
-   "github.com/ava-labs/coreth/rpc"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/ethclient"
+   "gitlab.com/flarenetwork/coreth/interfaces"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

// Client is a wrapper around rpc.Client that implements geth-specific functionality.
diff --git a/ethclient/ethclient.go b/ethclient/ethclient.go
index 0959a0a..8d30ca2 100644
--- a/ethclient/ethclient.go
+++ b/ethclient/ethclient.go
@@ -35,11 +35,11 @@ import (
    "math/big"

-   "github.com/ava-labs/avalanchego/ids"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/interfaces"
-   "github.com/ava-labs/coreth/rpc"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/interfaces"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

// Client defines typed wrappers for the Ethereum RPC API.
diff --git a/ethclient/signer.go b/ethclient/signer.go
index dafa943..45ef52d 100644
--- a/ethclient/signer.go
+++ b/ethclient/signer.go
@@ -30,8 +30,8 @@ import (
    "errors"
    "math/big"

-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

// senderFromServer is a types.Signer that remembers the sender address returned by the RPC
diff --git a/go.mod b/go.mod
index 981a551..fac1e12 100644
--- a/go.mod
+++ b/go.mod
@@ -1,4 +1,4 @@
-module github.com/ava-labs/coreth
+module gitlab.com/flarenetwork/coreth

go 1.15

diff --git a/interfaces/interfaces.go b/interfaces/interfaces.go
index efcde08..be8870f 100644
--- a/interfaces/interfaces.go
+++ b/interfaces/interfaces.go
@@ -32,8 +32,8 @@ import (
)

```

```

"errors"
"math/big"
-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

// NotFound is returned by API methods if the requested item does not exist.
diff --git a/internal/ethapi/api.go b/internal/ethapi/api.go
index b9ad558..e110a19 100644
--- a/internal/ethapi/api.go
+++ b/internal/ethapi/api.go
@@ -35,15 +35,6 @@ import (
    "time"

    "github.com/ava-labs/avalanchego/ids"
-   "github.com/ava-labs/coreth/accounts"
-   "github.com/ava-labs/coreth/accounts/keystore"
-   "github.com/ava-labs/coreth/accounts/scwallet"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/params"
-   "github.com/ava-labs/coreth/rpc"
    "github.com/davecgh/go-spew/spew"
    "github.com/ethereum/go-ethereum/accounts/abi"
    "github.com/ethereum/go-ethereum/common"
@@ -53,6 +44,15 @@ import (
    "github.com/ethereum/go-ethereum/log"
    "github.com/ethereum/go-ethereum/rlp"
    "github.com/tyler-smith/go-bip39"
+   "gitlab.com/flarenetwork/coreth/accounts"
+   "gitlab.com/flarenetwork/coreth/accounts/keystore"
+   "gitlab.com/flarenetwork/coreth/accounts/scwallet"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/params"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

// PublicEthereumAPI provides an API to access Ethereum related information.
diff --git a/internal/ethapi/backend.go b/internal/ethapi/backend.go
index 3d03734..f3b1643 100644
--- a/internal/ethapi/backend.go
+++ b/internal/ethapi/backend.go
@@ -31,19 +31,19 @@ import (
    "context"
    "math/big"

-   "github.com/ava-labs/coreth/accounts"
-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/bloombits"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/params"
-   "github.com/ava-labs/coreth/rpc"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/eth/downloader"
    "github.com/ethereum/go-ethereum/ethdb"
    "github.com/ethereum/go-ethereum/event"
+   "gitlab.com/flarenetwork/coreth/accounts"
+   "gitlab.com/flarenetwork/coreth/consensus"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/bloombits"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/params"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

// Backend interface provides the common API services (that are provided by
diff --git a/internal/ethapi/transaction_args.go b/internal/ethapi/transaction_args.go
index 6b06742..dcafd7 100644
--- a/internal/ethapi/transaction_args.go
+++ b/internal/ethapi/transaction_args.go
@@ -33,12 +33,12 @@ import (
    "fmt"
    "math/big"

-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/rpc"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/common/hexutil"
    "github.com/ethereum/go-ethereum/common/math"
    "github.com/ethereum/go-ethereum/log"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/rpc"
)

// TransactionArgs represents the arguments to construct a new transaction
diff --git a/miner/miner.go b/miner/miner.go
index 263439c..24ddc22 100644
--- a/miner/miner.go
+++ b/miner/miner.go
@@ -28,12 +28,12 @@ package miner

import (
-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/params"
    "github.com/ethereum/go-ethereum/common"
    "github.com/ethereum/go-ethereum/event"
+   "gitlab.com/flarenetwork/coreth/consensus"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/params"
)

// Backend wraps all methods required for mining.
diff --git a/miner/worker.go b/miner/worker.go
index c8c7268..69fal6 100644
--- a/miner/worker.go
+++ b/miner/worker.go
@@ -36,16 +36,16 @@ import (
    "sync"
    "time"

-   "github.com/ava-labs/coreth/consensus"
-   "github.com/ava-labs/coreth/consensus/dummy"
-   "github.com/ava-labs/coreth/consensus/misc"
-   "github.com/ava-labs/coreth/core"

```

```

- "github.com/ava-labs/coreth/core/state"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/event"
"github.com/ethereum/go-ethereum/log"
+ "gitlab.com/flarenetwork/coreth/consensus"
+ "gitlab.com/flarenetwork/coreth/consensus/dummy"
+ "gitlab.com/flarenetwork/coreth/consensus/misc"
+ "gitlab.com/flarenetwork/coreth/core"
+ "gitlab.com/flarenetwork/coreth/core/state"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
)

// environment is the worker's current environment and holds all of the current state information.
diff --git a/node/api.go b/node/api.go
index c38b2df..0c36fc7 100644
--- a/node/api.go
+++ b/node/api.go
@@ -27,10 +27,10 @@
package node

import (
- "github.com/ava-labs/coreth/internal/debug"
- "github.com/ava-labs/coreth/rpc"
"github.com/ethereum/go-ethereum/common/hexutil"
"github.com/ethereum/go-ethereum/crypto"
+ "gitlab.com/flarenetwork/coreth/internal/debug"
+ "gitlab.com/flarenetwork/coreth/rpc"
)

// apis returns the collection of built-in RPC APIs.
diff --git a/node/config.go b/node/config.go
index 4d2b83a..b51e67a 100644
--- a/node/config.go
+++ b/node/config.go
@@ -32,12 +32,12 @@ import (
"os"
"path/filepath"

- "github.com/ava-labs/coreth/accounts"
- "github.com/ava-labs/coreth/accounts/external"
- "github.com/ava-labs/coreth/accounts/keystore"
+ "gitlab.com/flarenetwork/coreth/accounts"
+ "gitlab.com/flarenetwork/coreth/accounts/external"
+ "gitlab.com/flarenetwork/coreth/accounts/keystore"

- "github.com/ava-labs/coreth/rpc"
"github.com/ethereum/go-ethereum/log"
+ "gitlab.com/flarenetwork/coreth/rpc"
)

// Config represents a small collection of configuration values to fine tune the
diff --git a/node/defaults.go b/node/defaults.go
index e4c826b..e3e2257 100644
--- a/node/defaults.go
+++ b/node/defaults.go
@@ -27,7 +27,7 @@
package node

import (
)

const (
diff --git a/node/node.go b/node/node.go
index 265e00d..1272a9f 100644
--- a/node/node.go
+++ b/node/node.go
@@ -31,8 +31,8 @@ import (
"github.com/ethereum/go-ethereum/event"

- "github.com/ava-labs/coreth/accounts"
- "github.com/ava-labs/coreth/rpc"
+ "gitlab.com/flarenetwork/coreth/accounts"
+ "gitlab.com/flarenetwork/coreth/rpc"
)

// Node is a container on which services can be registered.
diff --git a/plugin/evm/block.go b/plugin/evm/block.go
index cae83af..d749229 100644
--- a/plugin/evm/block.go
+++ b/plugin/evm/block.go
@@ -12,8 +12,8 @@ import (
"github.com/ethereum/go-ethereum/log"
"github.com/ethereum/go-ethereum/rlp"

- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"

"github.com/ava-labs/avalanchego/ids"
"github.com/ava-labs/avalanchego/snow/choices"
diff --git a/plugin/evm/block_verification.go b/plugin/evm/block_verification.go
index 03910af..1e52707 100644
--- a/plugin/evm/block_verification.go
+++ b/plugin/evm/block_verification.go
@@ -7,11 +7,11 @@ import (
"fmt"
"math/big"

- coreth "github.com/ava-labs/coreth/chain"
- "github.com/ava-labs/coreth/core/types"
- "github.com/ava-labs/coreth/params"
"github.com/ethereum/go-ethereum/common"
"github.com/ethereum/go-ethereum/trie"
+ coreth "gitlab.com/flarenetwork/coreth/chain"
+ "gitlab.com/flarenetwork/coreth/core/types"
+ "gitlab.com/flarenetwork/coreth/params"
)

var (
diff --git a/plugin/evm/config.go b/plugin/evm/config.go
index f184a09..721bf75 100644
--- a/plugin/evm/config.go
+++ b/plugin/evm/config.go
@@ -7,8 +7,8 @@ import (
"encoding/json"
"time"

- "github.com/ava-labs/coreth/eth"
"github.com/spf13/cast"
+ "gitlab.com/flarenetwork/coreth/eth"
)

const (

```

```
diff --git a/plugin/evm/export_tx.go b/plugin/evm/export_tx.go
index 3b50915..be2275f 100644
--- a/plugin/evm/export_tx.go
+++ b/plugin/evm/export_tx.go
@@ -1,5 +1,12 @@
+// (c) 2021, Flare Networks Limited. All rights reserved.
+//
+// This file is a derived work, based on the avalanche library whose original
+// notice appears below. It is distributed under a license compatible with the
+// licensing terms of the original code from which it is derived.
+// Please see the file LICENSE_AVALABS for licensing terms of the original work.
+// Please see the file LICENSE for licensing terms.
+//
+// (c) 2019-2020, Ava Labs, Inc. All rights reserved.
-// See the file LICENSE for licensing terms.
```

```
package evm

@@ -7,19 +14,14 @@ import (
    "fmt"
    "math/big"

-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/params"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/params"

-    "github.com/ava-labs/avalanchego/chains/atomic"
-    "github.com/ava-labs/avalanchego/database"
-    "github.com/ava-labs/avalanchego/ids"
-    "github.com/ava-labs/avalanchego/snow"
-    "github.com/ava-labs/avalanchego/stdlib/crypto"
-    "github.com/ava-labs/avalanchego/stdlib/math"
-    "github.com/ava-labs/avalanchego/vms/components/avax"
-    "github.com/ava-labs/avalanchego/vms/secp256k1fx"
-    "github.com/ethereum/go-ethereum/common"
-    "github.com/ethereum/go-ethereum/log"
)
```

```
// UnsignedExportTx is an unsigned ExportTx
@@ -46,75 +48,16 @@ func (tx *UnsignedExportTx) Verify(
    ctx *snow.Context,
    rules params.Rules,
) error {
-    switch {
-    case tx == nil:
-        return errNilTx
-    case tx.DestinationChain != avmID:
-        return errWrongChainID
-    case len(tx.ExportedOutputs) == 0:
-        return errNoExportOutputs
-    case tx.NetworkID != ctx.NetworkID:
-        return errWrongNetworkID
-    case ctx.ChainID != tx.BlockchainID:
-        return errWrongBlockchainID
-    }

-    for _, in := range tx.Ins {
-        if err := in.Verify(); err != nil {
-            return err
-        }
-    }

-    for _, out := range tx.ExportedOutputs {
-        if err := out.Verify(); err != nil {
-            return err
-        }
-    }

-    if !avax.IsSortedTransferableOutputs(tx.ExportedOutputs, Codec) {
-        return errOutputsNotSorted
-    }

-    if rules.IsApricotPhase1 && !IsSortedAndUniqueEVMInputs(tx.Ins) {
-        return errInputsNotSortedUnique
-    }

-    return nil
+    return errWrongChainID
}
```

```
func (tx *UnsignedExportTx) Cost() (uint64, error) {
-    byteCost := calcBytesCost(len(tx.UnsignedBytes()))
-    numSigs := uint64(len(tx.Ins))
-    sigCost, err := math.Mul64(numSigs, secp256k1fx.CostPerSignature)
-    if err != nil {
-        return 0, err
-    }
-    return math.Add64(byteCost, sigCost)
+    return 0, fmt.Errorf("exportTx transactions disabled")
}
```

```
// Amount of [assetID] burned by this transaction
func (tx *UnsignedExportTx) Burned(assetID ids.ID) (uint64, error) {
    var (
        spent uint64
        input uint64
        err error
    )

-    for _, out := range tx.ExportedOutputs {
-        if out.AssetId() == assetID {
-            spent, err = math.Add64(spent, out.Output().Amount())
-            if err != nil {
-                return 0, err
-            }
-        }
-    }

-    for _, in := range tx.Ins {
-        if in.AssetId == assetID {
-            input, err = math.Add64(input, in.Amount)
-            if err != nil {
-                return 0, err
-            }
-        }
-    }

-    return math.Sub64(input, spent)
+    return 0, fmt.Errorf("exportTx transactions disabled")
}
```

```
// SemanticVerify this transaction is valid.
@@ -125,105 +68,12 @@ func (tx *UnsignedExportTx) SemanticVerify(
    baseFee *big.Int,
    rules params.Rules,
) error {
-    if err := tx.Verify(vm.ctx.XChainID, vm.ctx, rules); err != nil {
-        return err
-    }

-    // Check the transaction consumes and produces the right amounts
-    fc := avax.NewFlowChecker()
-    switch {
```

```

- // Apply dynamic fees to export transactions as of Apricot Phase 3
- case rules.IsApricotPhase3:
-     cost, err := stx.Cost()
-     if err != nil {
-         return err
-     }
-     txFee, err := calculateDynamicFee(cost, baseFee)
-     if err != nil {
-         return err
-     }
-     fc.Produce(vm.ctx.AVAXAssetID, txFee)
-
- // Apply fees to export transactions before Apricot Phase 3
- default:
-     fc.Produce(vm.ctx.AVAXAssetID, params.AvalancheAtomicTxFee)
- }
- for _, out := range tx.ExportedOutputs {
-     fc.Produce(out.AssetId(), out.Output().Amount())
- }
- for _, in := range tx.Ins {
-     fc.Consume(in.AssetId, in.Amount)
- }
-
- if err := fc.Verify(); err != nil {
-     return fmt.Errorf("export tx flow check failed due to: %w", err)
- }
-
- if len(tx.Ins) != len(stx.Creds) {
-     return fmt.Errorf("export tx contained mismatched number of inputs/credentials (%d vs. %d)", len(tx.Ins), len(stx.Creds))
- }
-
- for i, input := range tx.Ins {
-     cred, ok := stx.Creds[i].(*secp256k1fx.Credential)
-     if !ok {
-         return fmt.Errorf("expected *secp256k1fx.Credential but got %T", cred)
-     }
-     if err := cred.Verify(); err != nil {
-         return err
-     }
-
-     if len(cred.Sigs) != 1 {
-         return fmt.Errorf("expected one signature for EVM Input Credential, but found: %d", len(cred.Sigs))
-     }
-     pubKeyIntf, err := vm.secpFactory.RecoverPublicKey(tx.UnsignedBytes(), cred.Sigs[0][:])
-     if err != nil {
-         return err
-     }
-     pubKey, ok := pubKeyIntf.(*crypto.PublicKeySECP256K1R)
-     if !ok {
-         // This should never happen
-         return fmt.Errorf("expected *crypto.PublicKeySECP256K1R but got %T", pubKeyIntf)
-     }
-     if input.Address != PublicKeyToEthAddress(pubKey) {
-         return errPublicKeySignatureMismatch
-     }
- }
-
- return nil
+ return fmt.Errorf("exportTx transactions disabled")
}

// Accept this transaction.
func (tx *UnsignedExportTx) Accept(ctx *snow.Context, batch database.Batch) error {
    txID := tx.ID()

    elems := make([]*atomic.Element, len(tx.ExportedOutputs))
    for i, out := range tx.ExportedOutputs {
        utxo := &avax.UTXO{
            UTXOID: avax.UTXOID{
                TxID:      txID,
                OutputIndex: uint32(i),
            },
            Asset: avax.Asset{ID: out.AssetId()},
            Out:   out.Out,
        }

        utxoBytes, err := Codec.Marshal(codecVersion, utxo)
        if err != nil {
            return err
        }
        utxoID := utxo.InputID()
        elem := &atomic.Element{
            Key:   utxoID[:],
            Value: utxoBytes,
        }
        if out, ok := utxo.Out.(avax.Addressable); ok {
            elem.Traits = out.Addresses()
        }

        elems[i] = elem
    }

    return ctx.SharedMemory.Apply(map[ids.ID]*atomic.Requests{tx.DestinationChain: {PutRequests: elems}}, batch)
+ return fmt.Errorf("exportTx transactions disabled")
}

// newExportTx returns a new ExportTx
@@ -235,121 +85,10 @@ func (vm *VM) newExportTx(
    baseFee *big.Int, // fee to use post-AP3
    keys []*crypto.PrivateKeySECP256K1R, // Pay the fee and provide the tokens
) (*Tx, error) {
    if vm.ctx.XChainID != chainID {
        return nil, errWrongChainID
    }

    outs := []*avax.TransferableOutput{ // Exported to X-Chain
        Asset: avax.Asset{ID: assetID},
        Out: &secp256k1fx.TransferOutput{
            Amt: amount,
            OutputOwners: secp256k1fx.OutputOwners{
                Locktime: 0,
                Threshold: 1,
                Addrs: []ids.ShortID{to},
            },
        },
    },
}

var (
    avaxNeeded      uint64 = 0
    ins, avaxIns    []EVMInput
    signers, avaxSigners []*crypto.PrivateKeySECP256K1R
    err             error
)

// consume non-AVAX
if assetID != vm.ctx.AVAXAssetID {
    ins, signers, err = vm.GetSpendableFunds(keys, assetID, amount)
    if err != nil {
        return nil, fmt.Errorf("couldn't generate tx inputs/signers: %w", err)
    }
}

```

```

-     } else {
-         avaxNeeded = amount
-     }
-
-     rules := vm.currentRules()
-     switch {
-     case rules.IsApricotPhase3:
-         utx := &UnsignedExportTx{
-             NetworkID:    vm.ctx.NetworkID,
-             BlockchainID:  vm.ctx.ChainID,
-             DestinationChain: chainID,
-             Ins:           ins,
-             ExportedOutputs: outs,
-         }
-         tx := &Tx{UnsignedAtomicTx: utx}
-         if err := tx.Sign(vm.codec, nil); err != nil {
-             return nil, err
-         }
-
-         var cost uint64
-         cost, err = tx.Cost()
-         if err != nil {
-             return nil, err
-         }
-
-         avaxIns, avaxSigners, err = vm.GetSpendableAVAXWithFee(keys, avaxNeeded, cost, baseFee)
-     default:
-         var newAvaxNeeded uint64
-         newAvaxNeeded, err = math.Add64(avaxNeeded, params.AvalancheAtomicTxFee)
-         if err != nil {
-             return nil, errOverflowExport
-         }
-         avaxIns, avaxSigners, err = vm.GetSpendableFunds(keys, vm.ctx.AVAXAssetID, newAvaxNeeded)
-     }
-     if err != nil {
-         return nil, fmt.Errorf("couldn't generate tx inputs/signers: %w", err)
-     }
-     ins = append(ins, avaxIns...)
-     signers = append(signers, avaxSigners...)
-
-     SortEVMInputsAndSigners(ins, signers)
-
-     // Create the transaction
-     utx := &UnsignedExportTx{
-         NetworkID:    vm.ctx.NetworkID,
-         BlockchainID:  vm.ctx.ChainID,
-         DestinationChain: chainID,
-         Ins:           ins,
-         ExportedOutputs: outs,
-     }
-     tx := &Tx{UnsignedAtomicTx: utx}
-     if err := tx.Sign(vm.codec, signers); err != nil {
-         return nil, err
-     }
-     return tx, utx.Verify(vm.ctx.XChainID, vm.ctx, vm.currentRules())
+     return nil, errWrongChainID
}

```

```

// EVMStateTransfer executes the state update from the atomic export transaction
func (tx *UnsignedExportTx) EVMStateTransfer(ctx *snow.Context, state *state.StateDB) error {
    addrs := map[[20]byte]uint64{}
    for _, from := range tx.Ins {
        if from.AssetId == ctx.AVAXAssetID {
            log.Debug("crosschain C->X", "addr", from.Address, "amount", from.Amount, "assetID", "AVAX")
            // We multiply the input amount by x2cRate to convert AVAX back to the appropriate
            // denomination before export.
            amount := new(big.Int).Mul(
                new(big.Int).SetUint64(from.Amount), x2cRate)
            if state.GetBalance(from.Address).Cmp(amount) < 0 {
                return errInsufficientFunds
            }
            state.SubBalance(from.Address, amount)
        } else {
            log.Debug("crosschain C->X", "addr", from.Address, "amount", from.Amount, "assetID", from.AssetId)
            amount := new(big.Int).SetUint64(from.Amount)
            if state.GetBalanceMultiCoin(from.Address, common.Hash(from.AssetId)).Cmp(amount) < 0 {
                return errInsufficientFunds
            }
            state.SubBalanceMultiCoin(from.Address, common.Hash(from.AssetId), amount)
        }
        if state.GetNonce(from.Address) != from.Nonce {
            return errInvalidNonce
        }
        addrs[from.Address] = from.Nonce
    }
    for addr, nonce := range addrs {
        state.SetNonce(addr, nonce+1)
    }
    return nil
+     return errInsufficientFunds
}

```

```

diff --git a/plugin/evm/export_tx_test.go b/plugin/evm/export_tx_test.go
index 44d6b6a..03af06a 100644

```

```

--- a/plugin/evm/export_tx_test.go
+++ b/plugin/evm/export_tx_test.go

```

```

@@ -7,7 +7,7 @@ import (
    "math/big"
    "testing"

```

```

-     "github.com/ava-labs/coreth/params"
+     "github.com/flarenetwork/coreth/params"
+
+     "github.com/ava-labs/avalanchego/chains/atomic"
+     "github.com/ava-labs/avalanchego/ids"

```

```

diff --git a/plugin/evm/gasprice_update.go b/plugin/evm/gasprice_update.go
index b96fa69..2c98fb2 100644

```

```

--- a/plugin/evm/gasprice_update.go
+++ b/plugin/evm/gasprice_update.go

```

```

@@ -8,7 +8,7 @@ import (
    "sync"
    "time"

```

```

-     "github.com/ava-labs/coreth/params"
+     "github.com/flarenetwork/coreth/params"
)

```

```

type gasPriceUpdater struct {
diff --git a/plugin/evm/gasprice_update_test.go b/plugin/evm/gasprice_update_test.go
index 179dbb8..4ab77ad 100644

```

```

--- a/plugin/evm/gasprice_update_test.go
+++ b/plugin/evm/gasprice_update_test.go

```

```

@@ -9,7 +9,7 @@ import (
    "testing"
    "time"

```

```

-     "github.com/ava-labs/coreth/params"
+     "github.com/flarenetwork/coreth/params"
)

```

```

type mockGasPriceSetter struct {

```

```
diff --git a/plugin/evm/import_tx.go b/plugin/evm/import_tx.go
index 0349820..8013ece 100644
--- a/plugin/evm/import_tx.go
+++ b/plugin/evm/import_tx.go
@@ -1,5 +1,12 @@
+// (c) 2021, Flare Networks Limited. All rights reserved.
+//
+// This file is a derived work, based on the avalanche library whose original
+// notice appears below. It is distributed under a license compatible with the
+// licensing terms of the original code from which it is derived.
+// Please see the file LICENSE_AVALABS for licensing terms of the original work.
+// Please see the file LICENSE for licensing terms.
+//
+// (c) 2019-2020, Ava Labs, Inc. All rights reserved.
-// See the file LICENSE for licensing terms.
```

```
package evm
```

```
@@ -7,19 +14,15 @@ import (
    "fmt"
    "math/big"

-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/params"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/params"

-    "github.com/ava-labs/avalanchego/chains/atomic"
-    "github.com/ava-labs/avalanchego/database"
-    "github.com/ava-labs/avalanchego/ids"
-    "github.com/ava-labs/avalanchego/snow"
-    "github.com/ava-labs/avalanchego/stdlib/crypto"
-    "github.com/ava-labs/avalanchego/stdlib/math"
-    "github.com/ava-labs/avalanchego/vms/components/avax"
-    "github.com/ava-labs/avalanchego/vms/secp256k1fx"
-    "github.com/ethereum/go-ethereum/common"
-    "github.com/ethereum/go-ethereum/log"
)

// UnsignedImportTx is an unsigned ImportTx
@@ -52,89 +55,16 @@ func (tx *UnsignedImportTx) Verify(
    ctx *snow.Context,
    rules params.Rules,
) error {
-    switch {
-    case tx == nil:
-        return errNilTx
-    case tx.SourceChain != avmID:
-        return errWrongChainID
-    case len(tx.ImportedInputs) == 0:
-        return errNoImportInputs
-    case tx.NetworkID != ctx.NetworkID:
-        return errWrongNetworkID
-    case ctx.ChainID != tx.BlockchainID:
-        return errWrongBlockchainID
-    case rules.IsApricotPhase3 && len(tx.Outs) == 0:
-        return errNoEVMOutputs
-    }
-
-    for _, out := range tx.Outs {
-        if err := out.Verify(); err != nil {
-            return err
-        }
-    }
-
-    for _, in := range tx.ImportedInputs {
-        if err := in.Verify(); err != nil {
-            return err
-        }
-    }
-
-    if !avax.IsSortedAndUniqueTransferableInputs(tx.ImportedInputs) {
-        return errInputsNotSortedUnique
-    }
-
-    if rules.IsApricotPhase2 {
-        if !IsSortedAndUniqueEVMOutputs(tx.Outs) {
-            return errOutputsNotSortedUnique
-        }
-    } else if rules.IsApricotPhase1 {
-        if !IsSortedEVMOutputs(tx.Outs) {
-            return errOutputsNotSorted
-        }
-    }
-
-    return nil
+    return errWrongChainID
}

func (tx *UnsignedImportTx) Cost() (uint64, error) {
-    cost := calcBytesCost(len(tx.UnsignedBytes()))
-    for _, in := range tx.ImportedInputs {
-        inCost, err := in.In.Cost()
-        if err != nil {
-            return 0, err
-        }
-        cost, err = math.Add64(cost, inCost)
-        if err != nil {
-            return 0, err
-        }
-    }
-    return cost, nil
+    return 0, fmt.Errorf("exportTx transactions disabled")
}

// Amount of [assetID] burned by this transaction
func (tx *UnsignedImportTx) Burned(assetID ids.ID) (uint64, error) {
-    var (
-        spent uint64
-        input uint64
-        err error
-    )
-
-    for _, out := range tx.Outs {
-        if out.AssetID == assetID {
-            spent, err = math.Add64(spent, out.Amount)
-            if err != nil {
-                return 0, err
-            }
-        }
-    }
-
-    for _, in := range tx.ImportedInputs {
-        if in.AssetID() == assetID {
-            input, err = math.Add64(input, in.Input().Amount())
-            if err != nil {
-                return 0, err
-            }
-        }
-    }
-
-    return math.Sub64(input, spent)
+    return 0, fmt.Errorf("exportTx transactions disabled")
}
```

```

}
// SemanticVerify this transaction is valid.
@@ -145,82 +75,7 @@ func (tx *UnsignedImportTx) SemanticVerify(
    baseFee *big.Int,
    rules params.Rules,
) error {
-   if err := tx.Verify(vm.ctx.XChainID, vm.ctx, rules); err != nil {
-       return err
-   }
-
-   // Check the transaction consumes and produces the right amounts
-   fc := avax.NewFlowChecker()
-   switch {
-   // Apply dynamic fees to import transactions as of Apricot Phase 3
-   case rules.IsApricotPhase3:
-       cost, err := stx.Cost()
-       if err != nil {
-           return err
-       }
-       txFee, err := calculateDynamicFee(cost, baseFee)
-       if err != nil {
-           return err
-       }
-       fc.Produce(vm.ctx.AVAXAssetID, txFee)
-
-   // Apply fees to import transactions as of Apricot Phase 2
-   case rules.IsApricotPhase2:
-       fc.Produce(vm.ctx.AVAXAssetID, params.AvalancheAtomicTxFee)
-   }
-   for _, out := range tx.Outs {
-       fc.Produce(out.AssetID, out.Amount)
-   }
-   for _, in := range tx.ImportedInputs {
-       fc.Consume(in.AssetID(), in.Input().Amount())
-   }
-
-   if err := fc.Verify(); err != nil {
-       return fmt.Errorf("import tx flow check failed due to: %w", err)
-   }
-
-   if len(stx.Creds) != len(tx.ImportedInputs) {
-       return fmt.Errorf("export tx contained mismatched number of inputs/credentials (%d vs. %d)", len(tx.ImportedInputs), len(stx.Creds))
-   }
-
-   if !vm.ctx.IsBootstrapped() {
-       // Allow for force committing during bootstrapping
-       return nil
-   }
-
-   utxoIDs := make([]byte, len(tx.ImportedInputs))
-   for i, in := range tx.ImportedInputs {
-       inputID := in.UTXOID.InputID()
-       utxoIDs[i] = inputID[:]
-   }
-   // allUTXOBytes is guaranteed to be the same length as utxoIDs
-   allUTXOBytes, err := vm.ctx.SharedMemory.Get(tx.SourceChain, utxoIDs)
-   if err != nil {
-       return fmt.Errorf("failed to fetch import UTXOs from %s with %w", tx.SourceChain, err)
-   }
-
-   for i, in := range tx.ImportedInputs {
-       utxoBytes := allUTXOBytes[i]
-
-       utxo := &avax.UTXO{}
-       if _, err := vm.codec.Unmarshal(utxoBytes, utxo); err != nil {
-           return err
-       }
-
-       cred := stx.Creds[i]
-
-       utxoAssetID := utxo.AssetID()
-       inAssetID := in.AssetID()
-       if utxoAssetID != inAssetID {
-           return errAssetIDMismatch
-       }
-
-       if err := vm.fx.VerifyTransfer(tx, in.In, cred, utxo.Out); err != nil {
-           return err
-       }
-   }
-
-   return vm.conflicts(tx.InputUTXOs(), parent)
+   return fmt.Errorf("exportTx transactions disabled")
}

// Accept this transaction and spend imported inputs
@@ -229,12 +84,7 @@ func (tx *UnsignedImportTx) SemanticVerify(
// only to have the transaction not be Accepted. This would be inconsistent.
// Recall that imported UTXOs are not kept in a versionDB.
func (tx *UnsignedImportTx) Accept(ctx *snow.Context, batch database.Batch) error {
-   utxoIDs := make([]byte, len(tx.ImportedInputs))
-   for i, in := range tx.ImportedInputs {
-       inputID := in.InputID()
-       utxoIDs[i] = inputID[:]
-   }
-   return ctx.SharedMemory.Apply(map[ids.ID]*atomic.Requests{tx.SourceChain: {RemoveRequests: utxoIDs}}, batch)
+   return fmt.Errorf("exportTx transactions disabled")
}

// newImportTx returns a new ImportTx
@@ -244,160 +94,11 @@ func (vm *VM) newImportTx(
    baseFee *big.Int, // fee to use post-AP3
    keys []*crypto.PrivateKeySECP256K1R, // Keys to import the funds
) (*Tx, error) {
-   if vm.ctx.XChainID != chainID {
-       return nil, errWrongChainID
-   }
-
-   kc := secp256k1fx.NewKeychain()
-   for _, key := range keys {
-       kc.Add(key)
-   }
-
-   atomicUTXOs, _, _, err := vm.GetAtomicUTXOs(chainID, kc.Addresses(), ids.ShortEmpty, ids.Empty, -1)
-   if err != nil {
-       return nil, fmt.Errorf("problem retrieving atomic UTXOs: %w", err)
-   }
-
-   importedInputs := []*avax.TransferableInput{}
-   signers := []*crypto.PrivateKeySECP256K1R{}
-
-   importedAmount := make(map[ids.ID]uint64)
-   now := vm.clock.Unix()
-   for _, utxo := range atomicUTXOs {
-       inputIntf, utxoSigners, err := kc.Spend(utxo.Out, now)
-       if err != nil {
-           continue
-       }
-       input, ok := inputIntf.(avax.TransferableIn)

```

```

-     if !ok {
-         continue
-     }
-     aid := utxo.AssetId()
-     importedAmount[aid], err = math.Add64(importedAmount[aid], input.Amount())
-     if err != nil {
-         return nil, err
-     }
-     importedInputs = append(importedInputs, &avax.TransferableInput{
-         UTXOID: utxo.UTXOID,
-         Asset:  utxo.AssetId(),
-         In:     input,
-     })
-     signers = append(signers, utxoSigners)
- }
- avax.SortTransferableInputsWithSigners(importedInputs, signers)
- importedAVAXAmount := importedAmount[vm.ctx.AVAXAssetID]
-
- outs := make([]EVMOutput, 0, len(importedAmount))
- // This will create unique outputs (in the context of sorting)
- // since each output will have a unique assetID
- for assetID, amount := range importedAmount {
-     // Skip the AVAX amount since it is included separately to account for
-     // the fee
-     if assetID == vm.ctx.AVAXAssetID || amount == 0 {
-         continue
-     }
-     outs = append(outs, EVMOutput{
-         Address: to,
-         Amount:  amount,
-         AssetID: assetID,
-     })
- }
-
- rules := vm.currentRules()
-
- var (
-     txFeeWithoutChange uint64
-     txFeeWithChange    uint64
- )
- switch {
- case rules.IsApricotPhase3:
-     if baseFee == nil {
-         return nil, errNilBaseFeeApricotPhase3
-     }
-     utx := &UnsignedImportTx{
-         NetworkID:    vm.ctx.NetworkID,
-         BlockchainID:  vm.ctx.ChainID,
-         Outs:          outs,
-         ImportedInputs: importedInputs,
-         SourceChain:   chainID,
-     }
-     tx := &Tx{UnsignedAtomicTx: utx}
-     if err := tx.Sign(vm.codec, nil); err != nil {
-         return nil, err
-     }
-
-     costWithoutChange, err := tx.Cost()
-     if err != nil {
-         return nil, err
-     }
-     costWithChange := costWithoutChange + EVMOutputGas
-
-     txFeeWithoutChange, err = calculateDynamicFee(costWithoutChange, baseFee)
-     if err != nil {
-         return nil, err
-     }
-     txFeeWithChange, err = calculateDynamicFee(costWithChange, baseFee)
-     if err != nil {
-         return nil, err
-     }
- case rules.IsApricotPhase2:
-     txFeeWithoutChange = params.AvalancheAtomicTxFee
-     txFeeWithChange = params.AvalancheAtomicTxFee
- }
-
- // AVAX output
- if importedAVAXAmount < txFeeWithoutChange { // imported amount goes toward paying tx fee
-     return nil, errInsufficientFundsForFee
- }
-
- if importedAVAXAmount > txFeeWithChange {
-     outs = append(outs, EVMOutput{
-         Address: to,
-         Amount:  importedAVAXAmount - txFeeWithChange,
-         AssetID: vm.ctx.AVAXAssetID,
-     })
- }
-
- // If no outputs are produced, return an error.
- // Note: this can happen if there is exactly enough AVAX to pay the
- // transaction fee, but no other funds to be imported.
- if len(outs) == 0 {
-     return nil, errNoEVMOutputs
- }
-
- SortEVMOutputs(outs)
-
- // Create the transaction
- utx := &UnsignedImportTx{
-     NetworkID:    vm.ctx.NetworkID,
-     BlockchainID:  vm.ctx.ChainID,
-     Outs:          outs,
-     ImportedInputs: importedInputs,
-     SourceChain:   chainID,
- }
- tx := &Tx{UnsignedAtomicTx: utx}
- if err := tx.Sign(vm.codec, signers); err != nil {
-     return nil, err
- }
- return tx, utx.Verify(vm.ctx.XChainID, vm.ctx, vm.currentRules())
+ return nil, errWrongChainID
- }

```

```

// EVMStateTransfer performs the state transfer to increase the balances of
// accounts accordingly with the imported EVMOutputs
func (tx *UnsignedImportTx) EVMStateTransfer(ctx *snow.Context, state *state.StateDB) error {
-     for _, to := range tx.Outs {
-         if to.AssetId == ctx.AVAXAssetID {
-             log.Debug("crosschain X->C", "addr", to.Address, "amount", to.Amount, "assetID", "AVAX")
-             // If the asset is AVAX, convert the input amount in nAVAX to gWei by
-             // multiplying by the x2c rate.
-             amount := new(big.Int).Mul(
-                 new(big.Int).SetUint64(to.Amount), x2cRate)
-             state.AddBalance(to.Address, amount)
-         } else {
-             log.Debug("crosschain X->C", "addr", to.Address, "amount", to.Amount, "assetID", to.AssetId)
-             amount := new(big.Int).SetUint64(to.Amount)
-             state.AddBalanceMultiCoin(to.Address, common.Hash(to.AssetId), amount)
-         }
-     }
- }

```

```

-     }
-     return nil
+     return errInsufficientFunds
}
diff --git a/plugin/evm/import_tx_test.go b/plugin/evm/import_tx_test.go
index c4c7df8..6551bb3 100644
--- a/plugin/evm/import_tx_test.go
+++ b/plugin/evm/import_tx_test.go
@@ -7,7 +7,7 @@ import (
    "math/big"
    "testing"

-    "github.com/ava-labs/coreth/params"
+    "gitlab.com/flarenetwork/coreth/params"

    "github.com/ava-labs/avalanchego/chains/atomic"
    "github.com/ava-labs/avalanchego/ids"
diff --git a/plugin/evm/service.go b/plugin/evm/service.go
index a6f56f2..ee079bb 100644
--- a/plugin/evm/service.go
+++ b/plugin/evm/service.go
@@ -17,11 +17,11 @@ import (
    "github.com/ava-labs/avalanchego/utils/crypto"
    "github.com/ava-labs/avalanchego/utils/formatting"
    "github.com/ava-labs/avalanchego/utils/json"
-    "github.com/ava-labs/coreth/params"
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/common/hexutil"
+    ethcrypto "github.com/ethereum/go-ethereum/crypto"
+    "github.com/ethereum/go-ethereum/log"
+    "gitlab.com/flarenetwork/coreth/params"
)

// test constants
diff --git a/plugin/evm/static_service.go b/plugin/evm/static_service.go
index 9c59225..f19fe78 100644
--- a/plugin/evm/static_service.go
+++ b/plugin/evm/static_service.go
@@ -8,7 +8,7 @@ import (
    "encoding/json"

    "github.com/ava-labs/avalanchego/utils/formatting"
-    "github.com/ava-labs/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core"
)

// StaticService defines the static API services exposed by the evm
diff --git a/plugin/evm/tx.go b/plugin/evm/tx.go
index ac4f798..b15365e 100644
--- a/plugin/evm/tx.go
+++ b/plugin/evm/tx.go
@@ -12,8 +12,8 @@ import (
    "github.com/ethereum/go-ethereum/common"

-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/params"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/params"

    "github.com/ava-labs/avalanchego/codec"
    "github.com/ava-labs/avalanchego/database"
diff --git a/plugin/evm/tx_test.go b/plugin/evm/tx_test.go
index d1d4947..ca73402 100644
--- a/plugin/evm/tx_test.go
+++ b/plugin/evm/tx_test.go
@@ -7,7 +7,7 @@ import (
    "math/big"
    "testing"

-    "github.com/ava-labs/coreth/params"
+    "gitlab.com/flarenetwork/coreth/params"
)

func TestCalculateDynamicFee(t *testing.T) {
diff --git a/plugin/evm/vm.go b/plugin/evm/vm.go
index 5850762..198f899 100644
--- a/plugin/evm/vm.go
+++ b/plugin/evm/vm.go
@@ -10,25 +10,26 @@ import (
    "errors"
    "fmt"
    "math/big"
+    "os"
    "path/filepath"
    "strings"
    "sync"
    "time"

-    "github.com/ava-labs/avalanchego/database/versiondb"
-    coreth "github.com/ava-labs/coreth/chain"
-    "github.com/ava-labs/coreth/consensus/dummy"
-    "github.com/ava-labs/coreth/core"
-    "github.com/ava-labs/coreth/core/state"
-    "github.com/ava-labs/coreth/core/types"
-    "github.com/ava-labs/coreth/eth/ethconfig"
-    "github.com/ava-labs/coreth/node"
-    "github.com/ava-labs/coreth/params"
-
-    "github.com/ava-labs/coreth/rpc"
+    coreth "gitlab.com/flarenetwork/coreth/chain"
+    "gitlab.com/flarenetwork/coreth/consensus/dummy"
+    "gitlab.com/flarenetwork/coreth/core"
+    "gitlab.com/flarenetwork/coreth/core/state"
+    "gitlab.com/flarenetwork/coreth/core/types"
+    "gitlab.com/flarenetwork/coreth/eth/ethconfig"
+    "gitlab.com/flarenetwork/coreth/node"
+    "gitlab.com/flarenetwork/coreth/params"
+
+    "github.com/ethereum/go-ethereum/common"
+    "github.com/ethereum/go-ethereum/log"
+    "github.com/ethereum/go-ethereum/rpc"
+    "gitlab.com/flarenetwork/coreth/rpc"

    avalancheRPC "github.com/gorilla/rpc/v2"
@@ -279,6 +280,6 @@ func (vm *VM) Initialize(
    return fmt.Errorf("failed to unmarshal config %s: %w", string(configBytes), err)
}

+ vm.config.EthAPIEnabled = false
+ vm.config.NetAPIEnabled = false
+ vm.config.Web3APIEnabled = false
+ vm.config.DebugAPIEnabled = false
+ vm.config.MaxBLocksPerRequest = 1
+ web3API := os.Getenv("WEB3_API")
+ if web3API == "enabled" {
+     vm.config.EthAPIEnabled = true
+     vm.config.NetAPIEnabled = true
+     vm.config.Web3APIEnabled = true
}

```

```

+     } else if web3API == "debug" {
+         vm.config.EthAPIEnabled = true
+         vm.config.NetAPIEnabled = true
+         vm.config.Web3APIEnabled = true
+         vm.config.DebugAPIEnabled = true
+         vm.config.TxPoolAPIEnabled = true
+         vm.config.Pruning = false
+         vm.config.MaxBlocksPerRequest = 0
+     }
+
+     if b, err := json.Marshal(vm.config); err == nil {
+         Log.Info("Initializing Coreth VM", "Version", Version, "Config", string(b))
+     } else {
@@ -337,7 +358,7 @@ func (vm *VM) Initialize(
    ethConfig.SnapshotVerify = vm.config.SnapshotVerify

    vm.chainConfig = g.Config
-   vm.networkID = ethConfig.NetworkID
+   vm.networkID = g.Config.ChainID.Uint64()
    vm.secpFactory = crypto.FactorySECP256K1R{Cache: cache.LRU{Size: secpFactoryCacheSize}}

    nodecfg := node.Config{
diff --git a/plugin/evm/vm_test.go b/plugin/evm/vm_test.go
index 80a6953..f4ec7e0 100644
--- a/plugin/evm/vm_test.go
+++ b/plugin/evm/vm_test.go
@@ -40,13 +40,13 @@ import (
    engCommon "github.com/ava-labs/avalanchego/snow/engine/common"

-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/eth"
-   "github.com/ava-labs/coreth/params"
-   "github.com/ava-labs/coreth/rpc"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/eth"
+   "gitlab.com/flarenetwork/coreth/params"
+   "gitlab.com/flarenetwork/coreth/rpc"

-   accountKeystore "github.com/ava-labs/coreth/accounts/keystore"
+   accountKeystore "gitlab.com/flarenetwork/coreth/accounts/keystore"
)

var (
diff --git a/plugin/main.go b/plugin/main.go
index 9637bea..af1f80a 100644
--- a/plugin/main.go
+++ b/plugin/main.go
@@ -12,7 +12,7 @@ import (
    "github.com/ava-labs/avalanchego/vms/rpcchainvm"

-   "github.com/ava-labs/coreth/plugin/evm"
+   "gitlab.com/flarenetwork/coreth/plugin/evm"
)

func main() {
diff --git a/signer/core/apitypes/types.go b/signer/core/apitypes/types.go
index cab7f9c..32a9ec4 100644
--- a/signer/core/apitypes/types.go
+++ b/signer/core/apitypes/types.go
@@ -32,9 +32,9 @@ import (
    "math/big"
    "strings"

-   "github.com/ava-labs/coreth/core/types"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "gitlab.com/flarenetwork/coreth/core/types"
)

type ValidationInfo struct {
diff --git a/tests/init.go b/tests/init.go
index c924236..1fe1359 100644
--- a/tests/init.go
+++ b/tests/init.go
@@ -31,7 +31,7 @@ import (
    "math/big"
    "sort"

-   "github.com/ava-labs/coreth/params"
+   "gitlab.com/flarenetwork/coreth/params"
)

// Forks table defines supported forks and their chain config.
diff --git a/tests/init_test.go b/tests/init_test.go
index 7f30fde..b72be17 100644
--- a/tests/init_test.go
+++ b/tests/init_test.go
@@ -40,7 +40,7 @@ import (
    "strings"
    "testing"

-   "github.com/ava-labs/coreth/params"
+   "gitlab.com/flarenetwork/coreth/params"
)

func readJSON(reader io.Reader, value interface{}) error {
diff --git a/tests/state_test_util.go b/tests/state_test_util.go
index 7df6737..43e3990 100644
--- a/tests/state_test_util.go
+++ b/tests/state_test_util.go
@@ -34,17 +34,17 @@ import (
    "strconv"
    "strings"

-   "github.com/ava-labs/coreth/core"
-   "github.com/ava-labs/coreth/core/state"
-   "github.com/ava-labs/coreth/core/state/snapshot"
-   "github.com/ava-labs/coreth/core/types"
-   "github.com/ava-labs/coreth/core/vm"
-   "github.com/ava-labs/coreth/params"
+   "github.com/ethereum/go-ethereum/common"
+   "github.com/ethereum/go-ethereum/common/hexutil"
+   "github.com/ethereum/go-ethereum/math"
+   "github.com/ethereum/go-ethereum/crypto"
+   "github.com/ethereum/go-ethereum/ethdb"
+   "gitlab.com/flarenetwork/coreth/core"
+   "gitlab.com/flarenetwork/coreth/core/state"
+   "gitlab.com/flarenetwork/coreth/core/state/snapshot"
+   "gitlab.com/flarenetwork/coreth/core/types"
+   "gitlab.com/flarenetwork/coreth/core/vm"
+   "gitlab.com/flarenetwork/coreth/params"
)

// StateTest checks transaction processing without block context.

```