

Session keys with outside execution

[Outside Execution](#) (Meta-transactions in the Ethereum world) allows external contracts to execute transactions from outside an account contract, thereby opening up new use-cases such as sponsored transactions, deploying an account on behalf of a user, transaction scheduling (limit orders) etc.

The setup is exactly the same as the "basic" session keys. We simply have a few more steps to do:

1. Prepare the contract call

...

```
Copy // example for creating the calldata const erc20Contract = new Contract( Erc20Abi as Abi, ETHTokenAddress, sessionAccount )
```

```
const calldata = erc20Contract.populate("transfer", { recipient: address, amount: parseInputAmountToUint256(amount) })
```

...

1. Prepare Execution from outside

Here you have two possibilities. Depending on your setup, you can chose between a "higher level" function `withcreateOutsideExecutionCall` which returns a signed call and a "lower level" `withcreateOutsideExecutionTypedData` which returns the session acout signature and the typed data.

- a. Get the raw Execute from outside call

...

```
Copy import { createOutsideExecutionCall } from "@argent/x-sessions"
```

```
const efoExecutionCall = await createOutsideExecutionCall({ session, // same object as before sessionKey, // same object as before calls: [calldata], argentSessionServiceUrl: ARGENT_SESSION_SERVICE_BASE_URL, network: CHAIN_ID === constants.NetworkName.SN_SEPOLIA ? "sepolia" : "mainnet", })
```

...

- 2.b. Get the signed Execute from outside call

...

```
Copy import { createOutsideExecutionTypedData } from "@argent/x-sessions"
```

```
const { signature, outsideExecutionTypedData } = await createOutsideExecutionTypedData({ session, sessionKey, calls: [calldata], argentSessionServiceUrl: ARGENT_SESSION_SERVICE_BASE_URL network // values "mainnet" | "sepolia", default to "mainnet" })
```

...

[Previous](#) [Implement session keys](#) [Next Demo App](#)

Last updated 1 month ago

Was this helpful?