

??

```
␣␣  
  
␣␣ (  
␣␣"␣"daral"->"dara tag1"  
␣"this is a ccndev test1"  
␣␣"␣"dara2"->"dara tag2"  
␣"this is a ccndev test2"  
␣);  
  
keys = "␣␣/bloxberg/keys";  
  
show keys;  
  
value = "␣␣/pdf";  
cert = "␣␣/certificate";  
crid = "␣␣/bloxberg/crid";  
bodycrid = "␣␣/hashlist";  
  
show value also cert also crid also bodycrid;  
  
save as blox2;
```

Output

"keys" → "{@context, id, type, issuer, issuanceDate, credentialSubject, crid, cridType, metadataJson, proof}"

"value" →

"https://www.wolframcloud.com/obj/ccn2/freeform/ff/blockchain/bloxberg2/cert_pdf/ff_free_blox2.pdf"

"cert" →

"https://www.wolframcloud.com/obj/ccn2/freeform/ff/blockchain/bloxberg2/cert_json/ff_free_blox2.json"

"crid" → "9fc15cac82ea792549e70d7f7ed796b87933c5cae4785250939fc745b55c1cae"

"bodycrd" → "{9fc15cac82ea792549e70d7f7ed796b87933c5cae4785250939fc745b55c1cae,54b6e8fda68070499e08cf95d11fa56db20f5bda24d1237f4f9bcdcfaaecdee}"



The image shows a certificate from Bloxberg. At the top center is the Bloxberg logo, which consists of the word "bloxberg" with a stylized 'X' made of dots. On either side of the logo are two pink diamond shapes. Below the logo, the text reads "ISSUES THIS RESEARCH OBJECT CERTIFICATE #164". A paragraph explains that the certificate serves as proof of existence for data on the Bloxberg blockchain. Below this, there are four sections: "MINTED NFT" with a URL, "TRANSACTION DETAILS" with a long hexadecimal string, "FILE HASH" with another long hexadecimal string, and "TIME STAMP" with a date and time. At the bottom center is a circular pink stamp that says "CERTIFIED" at the top and "VERIFY.BLOXBERG.ORG" at the bottom, with a stylized 'X' in the center.

bloxberg

ISSUES THIS
RESEARCH OBJECT CERTIFICATE
#164

The bloxberg certificate serves as a proof of existence that the data corresponding to the cryptographic identifier were transacted on the bloxberg blockchain at the issued time.

MINTED NFT	TRANSACTION DETAILS
https://explorer.l2.bloxberg.org/token/0x7B7BE38692557E4f033bd8bE0464cE7fc8F4C41/instance/164	0x03dc3426261e6f1abd34a3a40a7a3e5df882a864f9546604a9bd170717dae154

FILE HASH	TIME STAMP
54b6e8fda68070499e08cf95d11fa56db20f5bda24d1237f4f9bcdcfaaecdee	2026-05-26T02:23:14.476510

CERTIFIED
VERIFY.BLOXBERG.ORG

```
"[
  {
    "@context": [
      "https://www.w3.org/2018/credentials/v1",
      "https://w3id.org/bloxberg/schema/research_object_certificate_v1"
    ],
    "id": "https://bloxberg.org",
    "type": [
      "VerifiableCredential",
      "BloxbergCredential"
    ],
    "issuer": "https://raw.githubusercontent.com/bloxberg-org/issuer_json_l2/master/issuer.json",
    "issuanceDate": "2026-05-26T00:49:31.743598+00:00",
    "credentialSubject": {
      "id": "https:
```

```
//sepolia.arbiscan.io/address/0x3A2165222F8189A2Ed880e555868BeE1C67963e9\",
  \"issuingOrg\": {
    \"id\": \"https://bloxberg.org\"
  }
},
\"crId\": \"9fc15cac82ea792549e70d7f7ed796b87933c5cae4785250939fc745b55c1cae\",
\"crIdType\": \"sha2-256\",
\"metadataJson\": \"{
  \\\"dara1\\\": \\\"daratag1\\\",
  \\\"dara2\\\": \\\"daratag2\\\"
}\",
\"proof\": {
  \"type\": \"MerkleProof2019\",
  \"created\": \"2026-05-26T00: 49: 32.325863\",
  \"proofValue\":
\"z9nmN4tsD8AYm9oXySiMhLVX9vwX5XjRDJiYU4fJv9r5DoZFnxWHXSfG3wutGpnjLCTvoKVF8X5YSyikB6rFAyoNkUY3
U6SMNF42WNToyFRYZPPHbvU1pPvWcRKggfTMmJAKFTPr3Ef9iFSpKp2kiRc17PKfxBUHUsQ6cc65Yt6NyC92Td3RbpyWNT
EvXP5Zt7dS1dXNd56P9fJs1THhB59iQUvL4zvkb5uTGHsHA3yk7M53oxorzFDZgvH5CNnrgPBBcwVNWnkBUiLprjwPoWfo
7Se56buCJ5p37rr1mqaeEq8k9QYLAqKdB4hVpHEDAX1NWJQ75wa5ZDXvPegmpDxZ44PD9hokgnQGh8mh7f2rBgmnh9uqgv
pnjsgzAP1b3NxCP9C5yZZTWcNKfJmthUk4UuU\",
  \"proofPurpose\": \"assertionMethod\",
  \"verificationMethod\": \"ecdsa-koblitz-pubkey:
0x995b5A82500bc2558Fd37937e795f6468F14642c\",
  \"ens_name\": \"mpdl.berg\"
}
},
{
  \"@context\": [
    \"https://www.w3.org/2018/credentials/v1\",
    \"https://w3id.org/bloxberg/schema/research_object_certificate_v1\"
  ],
  \"id\": \"https://bloxberg.org\",
  \"type\": [
    \"VerifiableCredential\",
    \"BloxbergCredential\"
  ],
  \"issuer\": \"https://raw.githubusercontent.com/bloxberg-
org/issuer_json_l2/master/issuer.json\",
  \"issuanceDate\": \"2026-05-26T00: 49: 31.743598+00: 00\",
  \"credentialSubject\": {
    \"id\": \"https:
```

```
//sepolia.arbiscan.io/address/0x3A2165222F8189A2Ed880e555868BeE1C67963e9\",
  \"issuingOrg\": {
    \"id\": \"https://bloxberg.org\"
  }
},
\"crid\": \"54b6e8fda68070499e08cf95d11fa56db20f5bda24d1237f4f9bcdfaaecddee\",
\"cridType\": \"sha2-256\",
\"metadataJson\": \"{
  \\\"dara1\\\": \\\"daratag1\\\",
  \\\"dara2\\\": \\\"daratag2\\\"
}\",
\"proof\": {
  \"type\": \"MerkleProof2019\",
  \"created\": \"2026-05-26T00: 49: 32.329260\",
  \"proofValue\":
\"z9nmN4tsCzSUK5dJjPu71x2JjnpQCKMnVFzLXbTeEx89caacHd1rFHwKMfoAWJzTYzUHJurvYiwpdoTx8FjdBebr31Kv
9oNvhCrubyXCoA5yxu5fKYKqo6uTQgLqmTwmxE7vuUXhWYhDcSvuXTTEguyPa3PyfgdyuAqDLmQgXKhT7d7TCF2qs67Epg
effJLikgE39z79smuQfmnAD9YWAhZ7XqayCxiabCLpG4jSDKgbdB8V4x2dAwCxf3V6xcsRf5GxbhnZzo9T2ATfYq74D67d
gpVSYPa8gWAtYWZst2EFKwLji2ZJZy2jBJvKg7uaFsypNpoW3g4UXYed8C5S1vLykfCHviz1gRBH9ru8msws9TmP2uYoPX
VcsJ68Hyx25SsxP4MSpYKCPFABNny6BBamefx\",
  \"proofPurpose\": \"assertionMethod\",
  \"verificationMethod\": \"ecdsa-koblitz-pubkey:
0x995b5A82500bc2558Fd37937e795f6468F14642c\",
  \"ens_name\": \"mpdl.berg\"
}
}
]
```

Revision #5

Created 2026-05-26 02:41:46 UTC by Dara

Updated 2026-05-26 04:25:10 UTC by Dara