NeoBand NFC Reader Server Setup Instructions Slave Mode vs Master Mode

NeoBand NFC Reader Setup Instructions: Slave Mode vs Master Mode

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Overview

The uFR Zero Online NFC Reader supports two primary operating modes: **Slave Mode** and **Master Mode**. Each serves different use cases. This guide outlines:

- The differences between them
- When to use each
- How to configure your server accordingly
- How to read NeoBand tag data using your app's existing sector/block mapping and keys

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Key Concepts

Mapped Block-by-Block Payload Example

When parsing data from the NeoBand, here's a sample layout and what your server should extract:

Field	Sector	Block	Description
name	39	0	Username (hex → text)
role	1	0	Role: "hunger" or "bounty"
allegiance	39	1	Allegiance (hex → text)
faction	-	-	From sector index (1–31)
neo id	-	-	Card UID (from `GetCardIdEx`)

You can extract each using `BlockInSectorRead` and parse the `Data` hex string using UTF-8 decoding. Combine this with UID from `GetCardIdEx` to build the full identity payload for each tag scan.

Expected Server Data Output

When reading NeoBands from the reader, the expected payload your server should collect and parse includes:

- **name** (from Sector 39)
- **role** ("hunger" or "bounty", usually in Sector 1 for Alleycat)
- **allegiance** (Sector 36–38, depending on user)
- **faction** (identified by sector, e.g., Sector 1 = Alleycat)
- **neo id** (typically the UID or a system-generated ID)

You can extract these using a series of `BlockInSectorRead` calls combined with hex-to-text decoding.

- The NeoBand App uses **MIFARE Classic EV1 4K** tags.
- Tag data is structured according to the `FIELD_MAP` in your `map.js`:
  - **Sectors 1–31** → Factions (e.g., Sector 1 = Alleycat)
  - **Sectors 36–38** → Allegiances
  - **Sector 39** → User data (e.g., Username, Allegiance ID)
- Key usage:
  - **Key A (Read)**: `A0A1A2A3A4A5` (universal)
  - **Key B (Write)**: Faction-specific; e.g., **Alleycat uses** `010101010101` for writing

> Note: All server reads will use Key A for authentication (`A0A1A2A3A4A5`) and Auth mode `0x60`

Option 1: **Slave Mode** (Recommended for app + server control)

When to Use

- When you want both the NeoBand app and a local server to independently issue commands to the reader
- When the server needs to read full tag data (e.g., username + faction fields)

How It Works

- Reader passively accepts HTTP or WebSocket connections
- You send commands like `BlockInSectorRead` over `/shell`

Server Command Example: Read Role (Alleycat - Sector 1 Block 0)

```
const response = await fetch(`http://<READER_IP>/shell`, {
  method: "POST",
  headers: { "Content-Type": "text/plain" },
  body: "BlockInSectorRead 1 0 96 A0A1A2A3A4A5"
});
const data = await response.json();
```

```ts
// Convert hex data to UTF-8 text
toText = (hex) => Buffer.from(hex.replace(/^0x/, ''), 'hex').toString('utf-8').replace(/
�+$/, '')
console.log("[Role - hunger/bounty]:", toText(data.Data));
```
```ts
const response = await fetch(`http://<READER_IP>/shell`, {
  method: "POST",
  headers: { "Content-Type": "text/plain" },
  body: "BlockInSectorRead 1 0 96 A0A1A2A3A4A5"
});
const data = await response.json();
console.log("[Alleycat Field 1]:", data.Data);
```

Server Command Example: Read Name (Sector 39 Block 0)

```ts
const response = await fetch("http://<READER_IP>/shell", {
  method: "POST",
  headers: { "Content-Type": "text/plain" },
  body: "BlockInSectorRead 39 0 96 A0A1A2A3A4A5"
});
const data = await response.json();
toText = (hex) => Buffer.from(hex.replace(/^0x/, ''), 'hex').toString('utf-8').replace(/
�+$/, '')
console.log("[Name]:", toText(data.Data));
```

Server Command Example: Read Allegiance (Sector 39 Block 1)

```ts
const response = await fetch("http://<READER_IP>/shell", {
  method: "POST",
  headers: { "Content-Type": "text/plain" },
  body: "BlockInSectorRead 39 1 96 A0A1A2A3A4A5"
});
const data = await response.json();
toText = (hex) => Buffer.from(hex.replace(/^0x/, ''), 'hex').toString('utf-8').replace(/
�+$/, '')
console.log("[Allegiance]:", toText(data.Data));
```

Server Command Example: Read UID (Neo ID)

```ts
const response = await fetch("http://<READER_IP>/shell", {
  method: "POST",
  headers: { "Content-Type": "text/plain" },
  body: "GetCardIdEx"
});
const data = await response.json();
console.log("[Neo ID - Card UID]:", data.CardUid?.replace(/^0x/, '').toUpperCase() ||
data.Data);
```

```ts
const response = await fetch("http://<READER_IP>/shell", {
  method: "POST",
  headers: { "Content-Type": "text/plain" },
  body: "BlockInSectorRead 39 0 96 A0A1A2A3A4A5"
});
const data = await response.json();
console.log("[Username Hex]:", data.Data);
```

Configuration Checklist

- Reader Mode: **Slave**
- Enable `/shell` HTTP interface
- Ensure WebSocket server is enabled (optional for UID pushes)
- Make sure no HID or Transparent modes are enabled

Option 2: **Master Mode** (Push Mode)

When to Use

- When you want the reader to push card UID info to a server without any external request
- When you **don't need full field data**, just tag detection

How It Works

- Reader becomes a client and pushes UID + event data to your server
- You **cannot send commands like** `BlockRead` — only receive UID

Server Setup Example

```
const express = require('express');
const app = express();
app.use(express.json());

app.post("/reader-event", (req, res) => {
  console.log("Reader pushed UID:", req.body);
  res.sendStatus(200);
});

app.listen(3000, () => console.log("Listening on port 3000"));
```

Example Push Payload

```
{
  "CardUid": "49C64833",
  "CardType": 33,
  "Event": "CARD_DETECTED"
}
```

Configuration Checklist

- Reader Mode: **Master**
- Destination URL: `http://<your-server-ip>:3000/reader-event`
- Push UID on Card Present: Enabled
- Cannot use `/shell` HTTP in this mode

Summary Table

Feature	Slave Mode	Master Mode
Server sends read commands	✅ Yes	❌ No
Reader pushes UID to server	⚠️ Optional	✅ Yes
Full field data access	✅ Yes	❌ UID only
Compatible with NeoBand App	✅ Yes	⚠️ Not simultaneously
Use case	App + server control	Server push-only

Example Server Module (Reusable Read & Decode Function)

Unified NeoBand Payload Reader

```
const toText = (hex) => Buffer.from(hex.replace(/^0x/, ''), 'hex').toString('utf-
8').replace(/�+$/, '');

async function readNeoBandPayload(readerIp = '<READER_IP>') {
  const keyA = 'A0A1A2A3A4A5';

  const commands = [
    { name: 'role', sector: 1, block: 0 },
    { name: 'name', sector: 39, block: 0 },
    { name: 'allegiance', sector: 39, block: 1 }
  ];
```

```javascript
  const payload = {};

  for (const cmd of commands) {
    const command = `BlockInSectorRead ${cmd.sector} ${cmd.block} 96 ${keyA}`;
    const res = await fetch(`http://${readerIp}/shell`, {
      method: 'POST',
      headers: { 'Content-Type': 'text/plain' },
      body: command
    });
    const json = await res.json();
    payload[cmd.name] = toText(json.Data || '');
  }

  // Get UID (Neo ID)
  const uidRes = await fetch(`http://${readerIp}/shell`, {
    method: 'POST',
    headers: { 'Content-Type': 'text/plain' },
    body: 'GetCardIdEx'
  });
  const uidJson = await uidRes.json();
  payload.neoId = uidJson.CardUid?.replace(/^0x/, '').toUpperCase() || uidJson.Data || null;
  payload.faction = 'faction1'; // Determined based on source sector logic

  return payload;
}
```

This function reads all necessary fields from a tag and returns a structured object:

```json
{
  "role": "bounty",
  "name": "looloouser56",
  "allegiance": "IronBlade",
  "neoId": "49C64833",
  "faction": "faction1"
}
```

Use this as your foundation for syncing to a database, session tracker, or dispatch handler.

```javascript
async function readBlock(sector, block, readerIp = "192.168.0.11") {
  const keyA = "A0A1A2A3A4A5";
  const command = `BlockInSectorRead ${sector} ${block} 96 ${keyA}`;

  const response = await fetch(`http://${readerIp}/shell`, {
    method: 'POST',
    headers: { 'Content-Type': 'text/plain' },
    body: command
  });
```

```
  const json = await response.json();
  if (json.Status?.includes("UFR_OK")) {
    return json.Data;
  } else {
    throw new Error("Reader error: " + json.Status);
  }
}
```

Best Practice

- For full app/server control and complete field access, use **Slave Mode**
- For minimal UID logging, use **Master Mode**
- All server reads should use **Key A:** `A0A1A2A3A4A5` and Auth mode `0x60`
- **Do not attempt write operations unless you have the correct Key B** for the sector (e.g., `010101010101` for Alleycat write)

Map

``

```
/**
 * @file map.js
 * @description MIFARE Classic 4K Memory Map and Field Definitions
 *
 * This file defines the memory layout and field mappings for the Neoband App,
 * specifically designed for MIFARE Classic 4K cards. The mapping follows strict
 * MIFARE Classic memory structure constraints and D-Logic SDK requirements.
 *
 * Memory Structure:
 * - MIFARE Classic 4K has 40 sectors (numbered 0-39)
 * - Each sector has multiple blocks:
 *   - Sectors 0-31: 4 blocks each (0-3)
 *   - Sectors 32-39: 16 blocks each (0-15)
 * - Block 3 in each sector is the "trailer" block (contains keys and access bits)
 * - Only data blocks (0-2) are used for storing field values
 *
 * Field Mapping Rules:
 * 1. Factions use sectors 1-15 and 17-31 (30 factions total)
 *    - Each faction gets 3 fields (blocks 0-2 in their sector)
 *    - Sector 16 is reserved (skipped as per CSV)
 * 2. Allegiances use sectors 36-38
 *    - Each allegiance spans 5 consecutive sectors
```

```
 *     - Only blocks 0-2 are used in each sector
 * 3. User data (username) uses sector 39, block 0
 *
 * Authentication:
 * - All operations use the same authentication key (FFFFFFFFFFFF)
 * - Each block requires fresh authentication before access
 *
 * @version 3.0.4
 * @lastUpdated 2025-04-12
 */


// Global authentication key used for all sectors
const NFC_KEY = "FFFFFFFFFFFF";


/**
 * FIELD_MAP defines the complete memory layout for all factions, allegiances,
 * and user data. Each field includes:
 *
 * @property {string} name - Display name for the faction/allegiance
 * @property {number} sector - MIFARE sector number (0-39)
 * @property {Object} fields - Collection of data fields for this faction/allegiance
 * @property {Object} fields.fieldN - Individual field definition
 * @property {string} fields.fieldN.title - Display title for the field
 * @property {string} fields.fieldN.placeholder - Input placeholder text
 * @property {number} fields.fieldN.sector - MIFARE sector number for this field
 * @property {number} fields.fieldN.block - Block number within the sector (0-2)
 * @property {string} fields.fieldN.key - Authentication key for this block
 */
const FIELD_MAP = {
  factions: {
    faction1: {
      name: "Alleycat",
      sector: 1,
      fields: {
        field1: { title: "Hunter/Bounty", placeholder: "Enter Hunter/Bounty", sector: 1,
block: 0, key: NFC_KEY },
        field2: { title: "# of Wins", placeholder: "Enter # of wins", sector: 1, block: 1,
key: NFC_KEY },
        field3: { title: "Best Draw Time", placeholder: "Enter Best Draw Time", sector: 1,
block: 2, key: NFC_KEY }
      }
    },
    faction2: {
      name: "The Thirteens",
```

```
      sector: 2,
      fields: {
        field1: { title: "Faction #2 Field #1", placeholder: "Faction #2 Field #1
Placeholder", sector: 2, block: 0, key: NFC_KEY },
        field2: { title: "Faction #2 Field #2", placeholder: "Faction #2 Field #2
Placeholder", sector: 2, block: 1, key: NFC_KEY },
        field3: { title: "Faction #2 Field #3", placeholder: "Faction #2 Field #3
Placeholder", sector: 2, block: 2, key: NFC_KEY }
      }
    },
    faction3: {
      name: "Wayward Communication Corporation",
      sector: 3,
      fields: {
        field1: { title: "Faction #3 Field #1", placeholder: "Faction #3 Field #1
Placeholder", sector: 3, block: 0, key: NFC_KEY },
        field2: { title: "Faction #3 Field #2", placeholder: "Faction #3 Field #2
Placeholder", sector: 3, block: 1, key: NFC_KEY },
        field3: { title: "Faction #3 Field #3", placeholder: "Faction #3 Field #3
Placeholder", sector: 3, block: 2, key: NFC_KEY }
      }
    },
    faction4: {
      name: "Terminal 418",
      sector: 4,
      fields: {
        field1: { title: "Faction #4 Field #1", placeholder: "Faction #4 Field #1
Placeholder", sector: 4, block: 0, key: NFC_KEY },
        field2: { title: "Faction #4 Field #2", placeholder: "Faction #4 Field #2
Placeholder", sector: 4, block: 1, key: NFC_KEY },
        field3: { title: "Faction #4 Field #3", placeholder: "Faction #4 Field #3
Placeholder", sector: 4, block: 2, key: NFC_KEY }
      }
    },
    faction5: {
      name: "The Sentinels",
      sector: 5,
      fields: {
        field1: { title: "Faction #5 Field #1", placeholder: "Faction #5 Field #1
Placeholder", sector: 5, block: 0, key: NFC_KEY },
        field2: { title: "Faction #5 Field #2", placeholder: "Faction #5 Field #2
Placeholder", sector: 5, block: 1, key: NFC_KEY },
        field3: { title: "Faction #5 Field #3", placeholder: "Faction #5 Field #3
Placeholder", sector: 5, block: 2, key: NFC_KEY }
```

```
      }
    },
    faction6: {
      name: "Faction #6",
      sector: 6,
      fields: {
        field1: { title: "Faction #6 Field #1", placeholder: "Faction #6 Field #1
Placeholder", sector: 6, block: 0, key: NFC_KEY },
        field2: { title: "Faction #6 Field #2", placeholder: "Faction #6 Field #2
Placeholder", sector: 6, block: 1, key: NFC_KEY },
        field3: { title: "Faction #6 Field #3", placeholder: "Faction #6 Field #3
Placeholder", sector: 6, block: 2, key: NFC_KEY }
      }
    },
    faction7: {
      name: "Faction #7",
      sector: 7,
      fields: {
        field1: { title: "Faction #7 Field #1", placeholder: "Faction #7 Field #1
Placeholder", sector: 7, block: 0, key: NFC_KEY },
        field2: { title: "Faction #7 Field #2", placeholder: "Faction #7 Field #2
Placeholder", sector: 7, block: 1, key: NFC_KEY },
        field3: { title: "Faction #7 Field #3", placeholder: "Faction #7 Field #3
Placeholder", sector: 7, block: 2, key: NFC_KEY }
      }
    },
    faction8: {
      name: "Faction #8",
      sector: 8,
      fields: {
        field1: { title: "Faction #8 Field #1", placeholder: "Faction #8 Field #1
Placeholder", sector: 8, block: 0, key: NFC_KEY },
        field2: { title: "Faction #8 Field #2", placeholder: "Faction #8 Field #2
Placeholder", sector: 8, block: 1, key: NFC_KEY },
        field3: { title: "Faction #8 Field #3", placeholder: "Faction #8 Field #3
Placeholder", sector: 8, block: 2, key: NFC_KEY }
      }
    },
    faction9: {
      name: "Faction #9",
      sector: 9,
      fields: {
        field1: { title: "Faction #9 Field #1", placeholder: "Faction #9 Field #1
Placeholder", sector: 9, block: 0, key: NFC_KEY },
```

```
        field2: { title: "Faction #9 Field #2", placeholder: "Faction #9 Field #2
Placeholder", sector: 9, block: 1, key: NFC_KEY },
        field3: { title: "Faction #9 Field #3", placeholder: "Faction #9 Field #3
Placeholder", sector: 9, block: 2, key: NFC_KEY }
      }
    },
    faction10: {
      name: "Faction #10",
      sector: 10,
      fields: {
        field1: { title: "Faction #10 Field #1", placeholder: "Faction #10 Field #1
Placeholder", sector: 10, block: 0, key: NFC_KEY },
        field2: { title: "Faction #10 Field #2", placeholder: "Faction #10 Field #2
Placeholder", sector: 10, block: 1, key: NFC_KEY },
        field3: { title: "Faction #10 Field #3", placeholder: "Faction #10 Field #3
Placeholder", sector: 10, block: 2, key: NFC_KEY }
      }
    },
    faction11: {
      name: "Faction #11",
      sector: 11,
      fields: {
        field1: { title: "Faction #11 Field #1", placeholder: "Faction #11 Field #1
Placeholder", sector: 11, block: 0, key: NFC_KEY },
        field2: { title: "Faction #11 Field #2", placeholder: "Faction #11 Field #2
Placeholder", sector: 11, block: 1, key: NFC_KEY },
        field3: { title: "Faction #11 Field #3", placeholder: "Faction #11 Field #3
Placeholder", sector: 11, block: 2, key: NFC_KEY }
      }
    },
    faction12: {
      name: "Faction #12",
      sector: 12,
      fields: {
        field1: { title: "Faction #12 Field #1", placeholder: "Faction #12 Field #1
Placeholder", sector: 12, block: 0, key: NFC_KEY },
        field2: { title: "Faction #12 Field #2", placeholder: "Faction #12 Field #2
Placeholder", sector: 12, block: 1, key: NFC_KEY },
        field3: { title: "Faction #12 Field #3", placeholder: "Faction #12 Field #3
Placeholder", sector: 12, block: 2, key: NFC_KEY }
      }
    },
    faction13: {
      name: "Faction #13",
```

```
      sector: 13,
      fields: {
        field1: { title: "Faction #13 Field #1", placeholder: "Faction #13 Field #1
Placeholder", sector: 13, block: 0, key: NFC_KEY },
        field2: { title: "Faction #13 Field #2", placeholder: "Faction #13 Field #2
Placeholder", sector: 13, block: 1, key: NFC_KEY },
        field3: { title: "Faction #13 Field #3", placeholder: "Faction #13 Field #3
Placeholder", sector: 13, block: 2, key: NFC_KEY }
      }
    },
    faction14: {
      name: "Faction #14",
      sector: 14,
      fields: {
        field1: { title: "Faction #14 Field #1", placeholder: "Faction #14 Field #1
Placeholder", sector: 14, block: 0, key: NFC_KEY },
        field2: { title: "Faction #14 Field #2", placeholder: "Faction #14 Field #2
Placeholder", sector: 14, block: 1, key: NFC_KEY },
        field3: { title: "Faction #14 Field #3", placeholder: "Faction #14 Field #3
Placeholder", sector: 14, block: 2, key: NFC_KEY }
      }
    },
    faction15: {
      name: "Faction #15",
      sector: 15,
      fields: {
        field1: { title: "Faction #15 Field #1", placeholder: "Faction #15 Field #1
Placeholder", sector: 15, block: 0, key: NFC_KEY },
        field2: { title: "Faction #15 Field #2", placeholder: "Faction #15 Field #2
Placeholder", sector: 15, block: 1, key: NFC_KEY },
        field3: { title: "Faction #15 Field #3", placeholder: "Faction #15 Field #3
Placeholder", sector: 15, block: 2, key: NFC_KEY }
      }
    },
    // Sector 16 is skipped as per CSV
    faction16: {
      name: "Faction #16",
      sector: 17,
      fields: {
        field1: { title: "Faction #16 Field #1", placeholder: "Faction #16 Field #1
Placeholder", sector: 17, block: 0, key: NFC_KEY },
        field2: { title: "Faction #16 Field #2", placeholder: "Faction #16 Field #2
Placeholder", sector: 17, block: 1, key: NFC_KEY },
        field3: { title: "Faction #16 Field #3", placeholder: "Faction #16 Field #3
```

```
Placeholder", sector: 17, block: 2, key: NFC_KEY }
      }
    },
    faction17: {
      name: "Faction #17",
      sector: 18,
      fields: {
        field1: { title: "Faction #17 Field #1", placeholder: "Faction #17 Field #1
Placeholder", sector: 18, block: 0, key: NFC_KEY },
        field2: { title: "Faction #17 Field #2", placeholder: "Faction #17 Field #2
Placeholder", sector: 18, block: 1, key: NFC_KEY },
        field3: { title: "Faction #17 Field #3", placeholder: "Faction #17 Field #3
Placeholder", sector: 18, block: 2, key: NFC_KEY }
      }
    },
    faction18: {
      name: "Faction #18",
      sector: 19,
      fields: {
        field1: { title: "Faction #18 Field #1", placeholder: "Faction #18 Field #1
Placeholder", sector: 19, block: 0, key: NFC_KEY },
        field2: { title: "Faction #18 Field #2", placeholder: "Faction #18 Field #2
Placeholder", sector: 19, block: 1, key: NFC_KEY },
        field3: { title: "Faction #18 Field #3", placeholder: "Faction #18 Field #3
Placeholder", sector: 19, block: 2, key: NFC_KEY }
      }
    },
    faction19: {
      name: "Faction #19",
      sector: 20,
      fields: {
        field1: { title: "Faction #19 Field #1", placeholder: "Faction #19 Field #1
Placeholder", sector: 20, block: 0, key: NFC_KEY },
        field2: { title: "Faction #19 Field #2", placeholder: "Faction #19 Field #2
Placeholder", sector: 20, block: 1, key: NFC_KEY },
        field3: { title: "Faction #19 Field #3", placeholder: "Faction #19 Field #3
Placeholder", sector: 20, block: 2, key: NFC_KEY }
      }
    },
    faction20: {
      name: "Faction #20",
      sector: 21,
      fields: {
        field1: { title: "Faction #20 Field #1", placeholder: "Faction #20 Field #1
```

```
Placeholder", sector: 21, block: 0, key: NFC_KEY },
        field2: { title: "Faction #20 Field #2", placeholder: "Faction #20 Field #2
Placeholder", sector: 21, block: 1, key: NFC_KEY },
        field3: { title: "Faction #20 Field #3", placeholder: "Faction #20 Field #3
Placeholder", sector: 21, block: 2, key: NFC_KEY }
      }
    },
    faction21: {
      name: "Faction #21",
      sector: 22,
      fields: {
        field1: { title: "Faction #21 Field #1", placeholder: "Faction #21 Field #1
Placeholder", sector: 22, block: 0, key: NFC_KEY },
        field2: { title: "Faction #21 Field #2", placeholder: "Faction #21 Field #2
Placeholder", sector: 22, block: 1, key: NFC_KEY },
        field3: { title: "Faction #21 Field #3", placeholder: "Faction #21 Field #3
Placeholder", sector: 22, block: 2, key: NFC_KEY }
      }
    },
    faction22: {
      name: "Faction #22",
      sector: 23,
      fields: {
        field1: { title: "Faction #22 Field #1", placeholder: "Faction #22 Field #1
Placeholder", sector: 23, block: 0, key: NFC_KEY },
        field2: { title: "Faction #22 Field #2", placeholder: "Faction #22 Field #2
Placeholder", sector: 23, block: 1, key: NFC_KEY },
        field3: { title: "Faction #22 Field #3", placeholder: "Faction #22 Field #3
Placeholder", sector: 23, block: 2, key: NFC_KEY }
      }
    },
    faction23: {
      name: "Faction #23",
      sector: 24,
      fields: {
        field1: { title: "Faction #23 Field #1", placeholder: "Faction #23 Field #1
Placeholder", sector: 24, block: 0, key: NFC_KEY },
        field2: { title: "Faction #23 Field #2", placeholder: "Faction #23 Field #2
Placeholder", sector: 24, block: 1, key: NFC_KEY },
        field3: { title: "Faction #23 Field #3", placeholder: "Faction #23 Field #3
Placeholder", sector: 24, block: 2, key: NFC_KEY }
      }
    },
    faction24: {
```

```
        name: "Faction #24",
        sector: 25,
        fields: {
          field1: { title: "Faction #24 Field #1", placeholder: "Faction #24 Field #1
Placeholder", sector: 25, block: 0, key: NFC_KEY },
          field2: { title: "Faction #24 Field #2", placeholder: "Faction #24 Field #2
Placeholder", sector: 25, block: 1, key: NFC_KEY },
          field3: { title: "Faction #24 Field #3", placeholder: "Faction #24 Field #3
Placeholder", sector: 25, block: 2, key: NFC_KEY }
        }
      },
      faction25: {
        name: "Faction #25",
        sector: 26,
        fields: {
          field1: { title: "Faction #25 Field #1", placeholder: "Faction #25 Field #1
Placeholder", sector: 26, block: 0, key: NFC_KEY },
          field2: { title: "Faction #25 Field #2", placeholder: "Faction #25 Field #2
Placeholder", sector: 26, block: 1, key: NFC_KEY },
          field3: { title: "Faction #25 Field #3", placeholder: "Faction #25 Field #3
Placeholder", sector: 26, block: 2, key: NFC_KEY }
        }
      },
      faction26: {
        name: "Faction #26",
        sector: 27,
        fields: {
          field1: { title: "Faction #26 Field #1", placeholder: "Faction #26 Field #1
Placeholder", sector: 27, block: 0, key: NFC_KEY },
          field2: { title: "Faction #26 Field #2", placeholder: "Faction #26 Field #2
Placeholder", sector: 27, block: 1, key: NFC_KEY },
          field3: { title: "Faction #26 Field #3", placeholder: "Faction #26 Field #3
Placeholder", sector: 27, block: 2, key: NFC_KEY }
        }
      },
      faction27: {
        name: "Faction #27",
        sector: 28,
        fields: {
          field1: { title: "Faction #27 Field #1", placeholder: "Faction #27 Field #1
Placeholder", sector: 28, block: 0, key: NFC_KEY },
          field2: { title: "Faction #27 Field #2", placeholder: "Faction #27 Field #2
Placeholder", sector: 28, block: 1, key: NFC_KEY },
          field3: { title: "Faction #27 Field #3", placeholder: "Faction #27 Field #3
```

```
Placeholder", sector: 28, block: 2, key: NFC_KEY }
      }
    },
    faction28: {
      name: "Faction #28",
      sector: 29,
      fields: {
        field1: { title: "Faction #28 Field #1", placeholder: "Faction #28 Field #1
Placeholder", sector: 29, block: 0, key: NFC_KEY },
        field2: { title: "Faction #28 Field #2", placeholder: "Faction #28 Field #2
Placeholder", sector: 29, block: 1, key: NFC_KEY },
        field3: { title: "Faction #28 Field #3", placeholder: "Faction #28 Field #3
Placeholder", sector: 29, block: 2, key: NFC_KEY }
      }
    },
    faction29: {
      name: "Faction #29",
      sector: 30,
      fields: {
        field1: { title: "Faction #29 Field #1", placeholder: "Faction #29 Field #1
Placeholder", sector: 30, block: 0, key: NFC_KEY },
        field2: { title: "Faction #29 Field #2", placeholder: "Faction #29 Field #2
Placeholder", sector: 30, block: 1, key: NFC_KEY },
        field3: { title: "Faction #29 Field #3", placeholder: "Faction #29 Field #3
Placeholder", sector: 30, block: 2, key: NFC_KEY }
      }
    },
    faction30: {
      name: "Faction #30",
      sector: 31,
      fields: {
        field1: { title: "Faction #30 Field #1", placeholder: "Faction #30 Field #1
Placeholder", sector: 31, block: 0, key: NFC_KEY },
        field2: { title: "Faction #30 Field #2", placeholder: "Faction #30 Field #2
Placeholder", sector: 31, block: 1, key: NFC_KEY },
        field3: { title: "Faction #30 Field #3", placeholder: "Faction #30 Field #3
Placeholder", sector: 31, block: 2, key: NFC_KEY }
      }
    }
  },
  allegiances: {

    allegiance1: {
      name: "Endline",
```

```
    sector: 36,
    fields: {
      field1: { title: "Allegiance #1 Field 1", placeholder: "Allegiance #1 Field 1
Placeholder", sector: 36, block: 0, key: NFC_KEY },
      field2: { title: "Allegiance #1 Field 2", placeholder: "Allegiance #1 Field 2
Placeholder", sector: 36, block: 1, key: NFC_KEY },
      field3: { title: "Allegiance #1 Field 3", placeholder: "Allegiance #1 Field 3
Placeholder", sector: 36, block: 2, key: NFC_KEY },
      field4: { title: "Allegiance #1 Field 4", placeholder: "Allegiance #1 Field 4
Placeholder", sector: 36, block: 3, key: NFC_KEY },
      field5: { title: "Allegiance #1 Field 5", placeholder: "Allegiance #1 Field 5
Placeholder", sector: 36, block: 4, key: NFC_KEY },
      field6: { title: "Allegiance #1 Field 6", placeholder: "Allegiance #1 Field 6
Placeholder", sector: 36, block: 5, key: NFC_KEY },
      field7: { title: "Allegiance #1 Field 7", placeholder: "Allegiance #1 Field 7
Placeholder", sector: 36, block: 6, key: NFC_KEY },
      field8: { title: "Allegiance #1 Field 8", placeholder: "Allegiance #1 Field 8
Placeholder", sector: 36, block: 7, key: NFC_KEY },
      field9: { title: "Allegiance #1 Field 9", placeholder: "Allegiance #1 Field 9
Placeholder", sector: 36, block: 8, key: NFC_KEY },
      field10: { title: "Allegiance #1 Field 10", placeholder: "Allegiance #1 Field 10
Placeholder", sector: 36, block: 9, key: NFC_KEY },
      field11: { title: "Allegiance #1 Field 11", placeholder: "Allegiance #1 Field 11
Placeholder", sector: 36, block: 10, key: NFC_KEY },
      field12: { title: "Allegiance #1 Field 12", placeholder: "Allegiance #1 Field 12
Placeholder", sector: 36, block: 11, key: NFC_KEY },
      field13: { title: "Allegiance #1 Field 13", placeholder: "Allegiance #1 Field 13
Placeholder", sector: 36, block: 12, key: NFC_KEY },
      field14: { title: "Allegiance #1 Field 14", placeholder: "Allegiance #1 Field 14
Placeholder", sector: 36, block: 13, key: NFC_KEY },
      field15: { title: "Allegiance #1 Field 15", placeholder: "Allegiance #1 Field 15
Placeholder", sector: 36, block: 14, key: NFC_KEY }
    }
  },
  allegiance2: {
    name: "Helix",
    sector: 37,
    fields: {
      field1: { title: "Allegiance #2 Field 1", placeholder: "Allegiance #2 Field 1
Placeholder", sector: 37, block: 0, key: NFC_KEY },
      field2: { title: "Allegiance #2 Field 2", placeholder: "Allegiance #2 Field 2
Placeholder", sector: 37, block: 1, key: NFC_KEY },
      field3: { title: "Allegiance #2 Field 3", placeholder: "Allegiance #2 Field 3
Placeholder", sector: 37, block: 2, key: NFC_KEY },
```

```
        field4: { title: "Allegiance #2 Field 4", placeholder: "Allegiance #2 Field 4
Placeholder", sector: 37, block: 3, key: NFC_KEY },
        field5: { title: "Allegiance #2 Field 5", placeholder: "Allegiance #2 Field 5
Placeholder", sector: 37, block: 4, key: NFC_KEY },
        field6: { title: "Allegiance #2 Field 6", placeholder: "Allegiance #2 Field 6
Placeholder", sector: 37, block: 5, key: NFC_KEY },
        field7: { title: "Allegiance #2 Field 7", placeholder: "Allegiance #2 Field 7
Placeholder", sector: 37, block: 6, key: NFC_KEY },
        field8: { title: "Allegiance #2 Field 8", placeholder: "Allegiance #2 Field 8
Placeholder", sector: 37, block: 7, key: NFC_KEY },
        field9: { title: "Allegiance #2 Field 9", placeholder: "Allegiance #2 Field 9
Placeholder", sector: 37, block: 8, key: NFC_KEY },
        field10: { title: "Allegiance #2 Field 10", placeholder: "Allegiance #2 Field 10
Placeholder", sector: 37, block: 9, key: NFC_KEY },
        field11: { title: "Allegiance #2 Field 11", placeholder: "Allegiance #2 Field 11
Placeholder", sector: 37, block: 10, key: NFC_KEY },
        field12: { title: "Allegiance #2 Field 12", placeholder: "Allegiance #2 Field 12
Placeholder", sector: 37, block: 11, key: NFC_KEY },
        field13: { title: "Allegiance #2 Field 13", placeholder: "Allegiance #2 Field 13
Placeholder", sector: 37, block: 12, key: NFC_KEY },
        field14: { title: "Allegiance #2 Field 14", placeholder: "Allegiance #2 Field 14
Placeholder", sector: 37, block: 13, key: NFC_KEY },
        field15: { title: "Allegiance #2 Field 15", placeholder: "Allegiance #2 Field 15
Placeholder", sector: 37, block: 14, key: NFC_KEY }
      }
    },
    allegiance3: {
      name: "The Resistance",
      sector: 38,
      fields: {
        field1: { title: "Allegiance #3 Field 1", placeholder: "Allegiance #3 Field 1
Placeholder", sector: 38, block: 0, key: NFC_KEY },
        field2: { title: "Allegiance #3 Field 2", placeholder: "Allegiance #3 Field 2
Placeholder", sector: 38, block: 1, key: NFC_KEY },
        field3: { title: "Allegiance #3 Field 3", placeholder: "Allegiance #3 Field 3
Placeholder", sector: 38, block: 2, key: NFC_KEY },
        field4: { title: "Allegiance #3 Field 4", placeholder: "Allegiance #3 Field 4
Placeholder", sector: 38, block: 3, key: NFC_KEY },
        field5: { title: "Allegiance #3 Field 5", placeholder: "Allegiance #3 Field 5
Placeholder", sector: 38, block: 4, key: NFC_KEY },
        field6: { title: "Allegiance #3 Field 6", placeholder: "Allegiance #3 Field 6
Placeholder", sector: 38, block: 5, key: NFC_KEY },
        field7: { title: "Allegiance #3 Field 7", placeholder: "Allegiance #3 Field 7
Placeholder", sector: 38, block: 6, key: NFC_KEY },
```

```
        field8: { title: "Allegiance #3 Field 8", placeholder: "Allegiance #3 Field 8
Placeholder", sector: 38, block: 7, key: NFC_KEY },
        field9: { title: "Allegiance #3 Field 9", placeholder: "Allegiance #3 Field 9
Placeholder", sector: 38, block: 8, key: NFC_KEY },
        field10: { title: "Allegiance #3 Field 10", placeholder: "Allegiance #3 Field 10
Placeholder", sector: 38, block: 9, key: NFC_KEY },
        field11: { title: "Allegiance #3 Field 11", placeholder: "Allegiance #3 Field 11
Placeholder", sector: 38, block: 10, key: NFC_KEY },
        field12: { title: "Allegiance #3 Field 12", placeholder: "Allegiance #3 Field 12
Placeholder", sector: 38, block: 11, key: NFC_KEY },
        field13: { title: "Allegiance #3 Field 13", placeholder: "Allegiance #3 Field 13
Placeholder", sector: 38, block: 12, key: NFC_KEY },
        field14: { title: "Allegiance #3 Field 14", placeholder: "Allegiance #3 Field 14
Placeholder", sector: 38, block: 13, key: NFC_KEY },
        field15: { title: "Allegiance #3 Field 15", placeholder: "Allegiance #3 Field 15
Placeholder", sector: 38, block: 14, key: NFC_KEY }
      }
    }
  },
  //User data is stored in sector 39, Staff will have the ability to write to this sector
    user: {
      name: "User Data",
      sector: 39,
      fields: {
        field1: { title: "Username", placeholder: "Enter Username", sector: 39, block: 0,
key: NFC_KEY },
        field2: { title: "User Field 2", placeholder: "User Field 2 Placeholder", sector: 39,
block: 1, key: NFC_KEY },
        field3: { title: "Registration", placeholder: "Enter Registration", sector: 39,
block: 2, key: NFC_KEY },
        field4: { title: "Allegiance Affiliation", placeholder: "Enter Allegiance", sector:
39, block: 3, key: NFC_KEY },
        field5: { title: "User Field 5", placeholder: "User Field 5 Placeholder", sector: 39,
block: 4, key: NFC_KEY },
        field6: { title: "User Field 6", placeholder: "User Field 6 Placeholder", sector: 39,
block: 5, key: NFC_KEY },
        field7: { title: "User Field 7", placeholder: "User Field 7 Placeholder", sector: 39,
block: 6, key: NFC_KEY },
        field8: { title: "User Field 8", placeholder: "User Field 8 Placeholder", sector: 39,
block: 7, key: NFC_KEY },
        field9: { title: "User Field 9", placeholder: "User Field 9 Placeholder", sector: 39,
block: 8, key: NFC_KEY },
        field10: { title: "User Field 10", placeholder: "User Field 10 Placeholder", sector:
39, block: 9, key: NFC_KEY },
```

```
        field11: { title: "User Field 11", placeholder: "User Field 11 Placeholder", sector:
39, block: 10, key: NFC_KEY },
        field12: { title: "User Field 12", placeholder: "User Field 12 Placeholder", sector:
39, block: 11, key: NFC_KEY },
        field13: { title: "User Field 13", placeholder: "User Field 13 Placeholder", sector:
39, block: 12, key: NFC_KEY },
        field14: { title: "User Field 14", placeholder: "User Field 14 Placeholder", sector:
39, block: 13, key: NFC_KEY },
        field15: { title: "User Field 15", placeholder: "User Field 15 Placeholder", sector:
39, block: 14, key: NFC_KEY },
      }
    }
  };
```