**Version History**

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| **Version** | **Date (YYYY-MM-DD)** | **Author** | **Description** |
| 1.0 | 2025-01-08 | Haroon Nasher | Initial draft of the DTS technical specifications. |

These are the minimum system requirements and deployment guidelines for installing DTS on a server. If your device does not meet these requirements, you may need to upgrade your hardware or consider purchasing a new server.

1. **System Requirements**
   1. **Hardware Requirements:**
      1. Processor: Minimum 4-core CPU,
      2. RAM: 8GB RAM,
      3. Storage: 100GB storage or larger storage device.
   2. **Operating Systems:** Supported platforms (Windows, Linux).
   3. **Browser Compatibility:** Modern web browsers like Chrome, Firefox, or Edge.
2. **Deployment**

The system is packaged as Docker containers, making it portable and straightforward to deploy on any infrastructure that supports Docker.

1. **Installation Types**

DTS offers two deployment options:

* 1. **Country Instance:** Hosted and managed by the country’s local infrastructure.
  2. **UNDRR Instance:** Hosted on the UN Cloud System, providing a centralized, secure, and globally accessible solution.

1. **Installing DTS as Country Instance**
   1. Clone the repository
   2. Install the dependencies
   3. Configure the environment
   4. Database setup
   5. Build and Deploy
2. **Installing DTS as UNDRR Instance**
3. **Technology Stack**
   1. **Backend Technologies**
      1. Programming Language: (Node.js)
      2. Framework: Remix.js
      3. Database: PostgreSQL for relational data management with PostGIS.
   2. **Frontend Technologies**
      1. Framework/library (React).
      2. Styling tools.
   3. **APIs and Integrations:**
      1. RESTful Api, SFM.
   4. **Containerization:** Docker.
4. **System Architecture**
   1. Application Architecture:
   2. Data Flow:
   3. Security Features:
      1. Authentication methods (e.g., OAuth2, JWT).
5. **Support and Documentation**

The support and maintenance will be provided in-house for the “UNDRR instance” and for the shared code base available for all countries. For country specific needs, a self-help website will be set up with code sharing Comprehensive user manuals.