Environment Readiness Verification Log

Version: 1.0
Date: September 22, 2025
Environment: Windows PC (HANA-X-JR0) → Ubuntu 24.04 Server (HX dev server)
Approach: Verification-first workflow with Do → Verify → Log pattern

Verification Status Overview

Category	Total Steps	Passed	Failed	Pending
Ubuntu Server Setup	5	0	0	5
Windows PC Setup	3	0	0	3
SSH Configuration	3	0	0	3
VS Code Remote Setup	2	0	0	2
Hosts File Configuration	2	0	0	2
Virtual Environment Setup	3	0	0	3
Final Verification	2	0	0	2
TOTAL	**20**	**0**	**0**	**20**

Detailed Verification Log

Ubuntu Server Setup

Component	Status	Timestamp	Verification Command	Result	Notes
System Update & CA Certificates	⏳ PENDING		`ls -la /etc/ssl/certs/ | wc -l`		
Git Installation	⏳ PENDING		`git --version`		
Python 3.11 Environment	⏳ PENDING		`python3 --version`		
OpenSSH Server	⏳ PENDING		`sudo systemctl status ssh | grep "Active:"`		
Development Tools	⏳ PENDING		`gcc --version | head -1`		

Windows PC Setup

Component	Status	Timestamp	Verification Command	Result	Notes
VS Code Installation	⏳ PENDING		`code --version`		
Git for Windows	⏳ PENDING		`git --version`		
Remote-SSH Extension	⏳ PENDING		VS Code Remote-SSH commands available		

SSH Configuration

Component	Status	Timestamp	Verification Command	Result	Notes
SSH Key Generation	⏳ PENDING		`ssh-add -l`		
SSH Key Deployment	⏳ PENDING		`ls -la ~/.ssh/authorized_keys`		
SSH Config File	⏳ PENDING		`ssh hx-dev-server "echo 'SSH connection successful'"`		

VS Code Remote Setup

Component	Status	Timestamp	Verification Command	Result	Notes
Remote-SSH Connection	⏳ PENDING		VS Code connects to hx-dev-server		
Remote Extensions	⏳ PENDING		`python3 --version` in VS Code terminal		

Hosts File Configuration

Component	Status	Timestamp	Verification Command	Result	Notes
Ubuntu Hosts File	⏳ PENDING		`getent hosts dev-test.hana-x.ai && ping -c 1 dev-test.hana-x.ai`		
Windows Hosts File	⏳ PENDING		`findstr dev-test.hana-x.ai C:\Win-dows\System32\drivers\etc\hosts && ping -n 1 dev-test.hana-x.ai`		

Virtual Environment Setup

Component	Status	Timestamp	Verification Command	Result	Notes
Virtual Environment Creation	⏳ PENDING		`which python` (should show venv path)		
VS Code Python Interpreter	⏳ PENDING		VS Code status bar shows correct interpreter		
Environment Packages	⏳ PENDING		`pip list` shows pytest, requests		

Final Verification

Component	Status	Timestamp	Verification Command	Result	Notes
Environment Test Script	⏳ PENDING		`python test_environment.py`		
VS Code Integration Test	⏳ PENDING		Run test script in VS Code (F5)		

Status Legend

- ✅ **PASS**: Verification successful, component working as expected
- ❌ **FAIL**: Verification failed, requires immediate attention
- ⏳ **PENDING**: Not yet tested
- 🔄 **RETRY**: Failed once, retrying after fix
- ⚠️ **WARNING**: Working but with issues noted

Critical Issues Log

Issue	Component	Timestamp	Description	Resolution	Status

Environment Summary

System Information

- **Ubuntu Server IP:** [TO BE FILLED]
- **Ubuntu Version:** [TO BE FILLED]
- **Windows Version:** [TO BE FILLED]
- **Python Version:** [TO BE FILLED]
- **Git Version:** [TO BE FILLED]

Network Configuration

- **SSH Connection:** [TO BE TESTED]
- **Domain Resolution:** [TO BE TESTED]
- **Firewall Status:** [TO BE CHECKED]

Development Environment

- **Virtual Environment Path:** [TO BE FILLED]

- **VS Code Remote Connection:** [TO BE TESTED]
- **Python Interpreter:** [TO BE CONFIGURED]

Completion Checklist

Pre-Setup

- [ ] Network connectivity verified
- [ ] Admin access confirmed on both systems
- [ ] Internet connectivity confirmed

Core Components

- [ ] Ubuntu server fully configured
- [ ] Windows PC setup complete
- [ ] SSH connection established
- [ ] VS Code Remote-SSH working

Training Environment

- [ ] Hosts file configured on both systems
- [ ] Virtual environment created and configured
- [ ] Python 3.11 environment verified
- [ ] All verification tests passing

Final Sign-off

- [ ] All 20 verification steps completed
- [ ] No critical issues remaining
- [ ] Environment ready for Module 1 training
- [ ] Documentation complete and accurate

Instructions for Use

1. **During Setup:** Update each verification step as you complete it
2. **Status Updates:** Use the status legend consistently
3. **Timestamp Format:** Use YYYY-MM-DD HH:MM:SS format
4. **Issue Tracking:** Log any problems in the Critical Issues section
5. **Final Review:** Complete the Environment Summary before sign-off

CRITICAL: Do not proceed to next step if any verification fails. Fix issues immediately and re-test.

This log implements the verification-first workflow with Do → Verify → Log pattern for systematic environment validation.