



# NVIDIA AI Software Ecosystem

## Unit 5 - Summary

- **NVIDIA AI Software:** NVIDIA AI Software Ecosystem includes vGPU Foundation, Frameworks for Deep Learning, and an Overview of the Software Stack.
  - **NVIDIA AI Enterprise:** NVIDIA AI Enterprise is an end-to-end AI software suite that includes over 50 frameworks and pre-trained models.
  - **NGC Catalog:** NGC Catalog is a GPU-optimized hub for AI and HPC software, including containers, pre-trained models, and Helm charts.
  - **AI Workflows:** NVIDIA AI Workflows are prepackaged reference applications that accelerate the path to AI outcomes, reducing cost and improving accuracy.
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### What is vGPU?

vGPU stands for Virtual GPU, which is a foundational technology for AI that delivers GPU acceleration to every visual workload.

### What are the benefits of GPU virtualization?

The benefits of GPU virtualization include bare-metal performance, insight and tools, business continuity and workload balancing, resource sharing and improved utilization, infrastructure and data security, and operational management.

### What are ML/DL frameworks?

Machine learning and deep learning frameworks are building blocks for designing, training, and validating machine learning models and deep neural networks, through a high-level programming interface.

### What is the NVIDIA Deep Learning Software Stack?

The NVIDIA Deep Learning Software Stack includes CUDA, NVIDIA Container Runtime, NGC Containers, and DL Frameworks.



### **What is NVIDIA AI Enterprise?**

NVIDIA AI Enterprise is the software layer of the most advanced AI platform, which includes over 50 frameworks and pretrained models.



### **What are NVIDIA AI Workflows?**

NVIDIA AI Workflows are prepackaged reference applications to rapidly automate businesses with AI, reducing the cost of developing and deploying AI solutions.