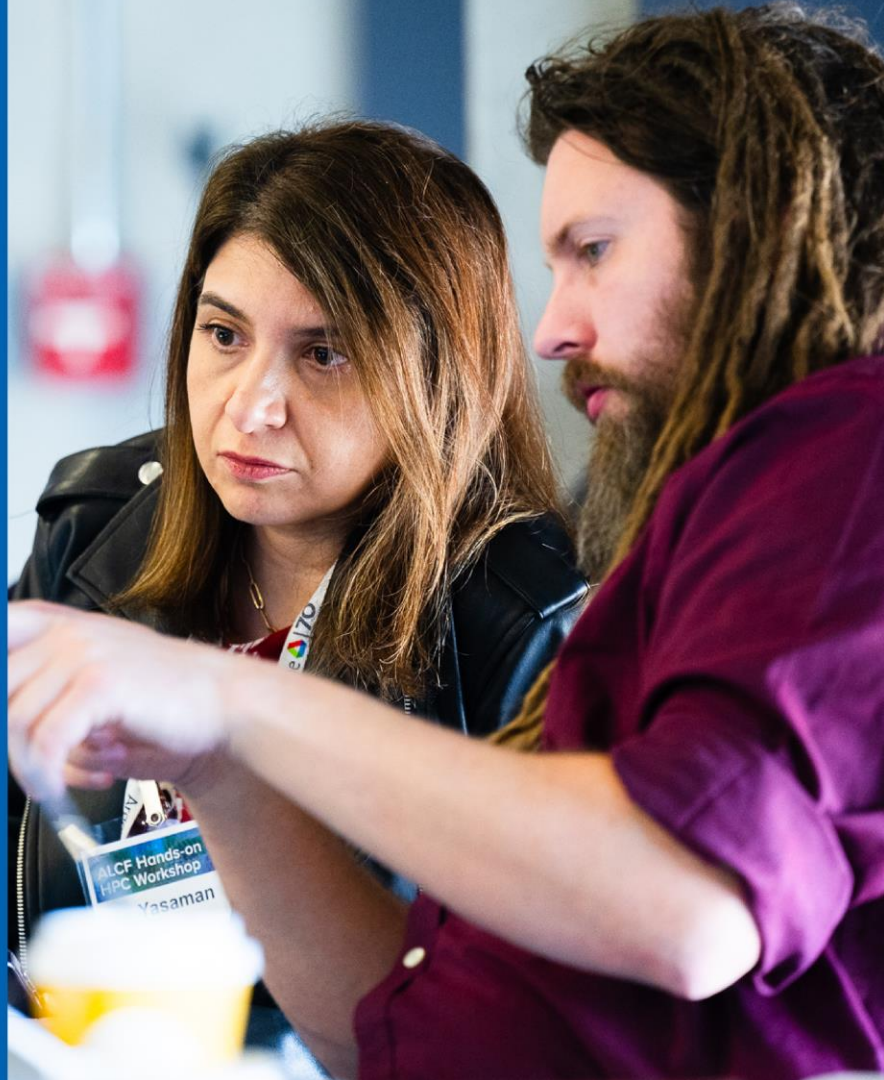
WORKSHOP

ALCF Hands-on HPC Workshop

October 7-9, 2025
Argonne National Laboratory

U.S. DEPARTMENT of ENERGY

Argonne NATIONAL LABORATORY



DEPLOYING AI INFERENCE SERVICES AT ALCF

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U.S. DEPARTMENT of ENERGY
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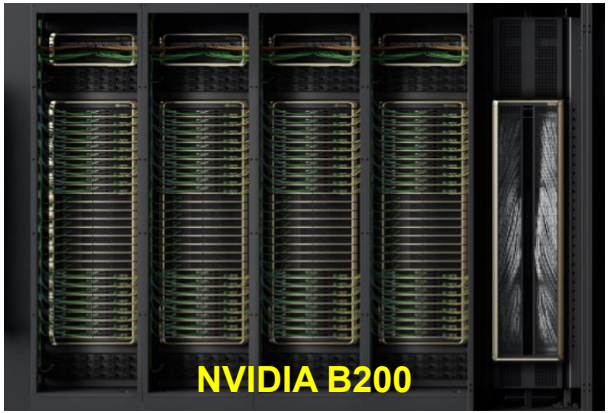
LARGE COLLABORATION

- Ryan Chard, Nick Saint, Tom Uram, Rajeev Thakur, Ken Raffenetti, Le Chen, Yanfei Guo, Krishna Chetty, Murali Emani, Khalid Hossain, Nathan Nichols, Rachana Ananthakrishnan, Anthony Avarca, Bill Allcock, Tommie Jackson, Ian Foster, Mike Papka, Rick Stevens, ALCF and CELS Operations, Globus, Aurora-GPT, and many more.

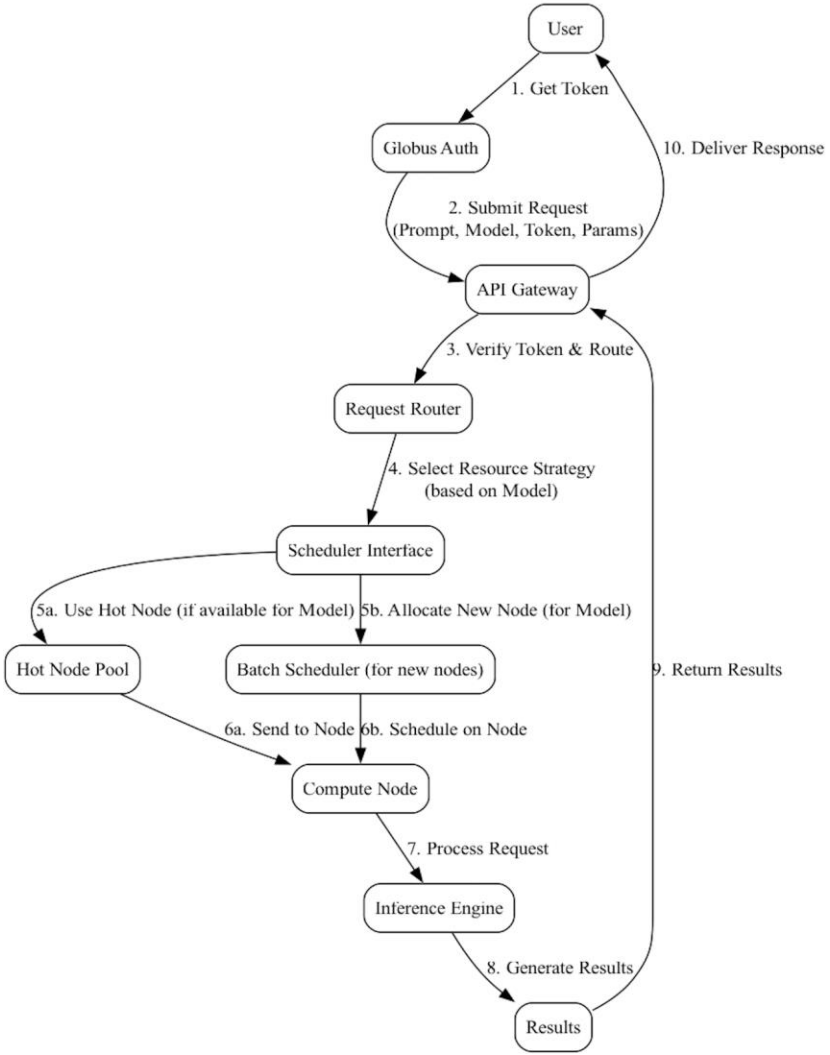
- Joint collaboration with Globus

ALCF IS DEPLOYING DIVERSE INFERENCE SYSTEMS FOR SCIENCE



WORKFLOW OVERVIEW

- User generates an access token (API key)
- User submits LLM request to Gateway API
- API validates user and request arguments
- API routes request to remote HPC resources
- The service submits a job to the local scheduler to load the model (or reuses already-acquired compute nodes)
- The service executes the LLM request on the behalf of the user
- Result is returned to the Gateway API
- Result is returned to the user



PRESENTATION OVERVIEW

- **Overview of the User Interface**
  - Entry points to our inference service
  - Motivation behind our development

- **ALCF Inference Service Architecture**
  - Overview of the system components
  - Authentication and authorization
  - Orchestration and configuration
  - Available models

- **Capabilities and Features**
  - Latency, scaling, federated endpoints
  - Monitoring, production-ready with containers

- **Usage and Examples**
  - How to use the API (Python, cURL, agentic workflows)
  - How to use the web interface
  - Science use cases

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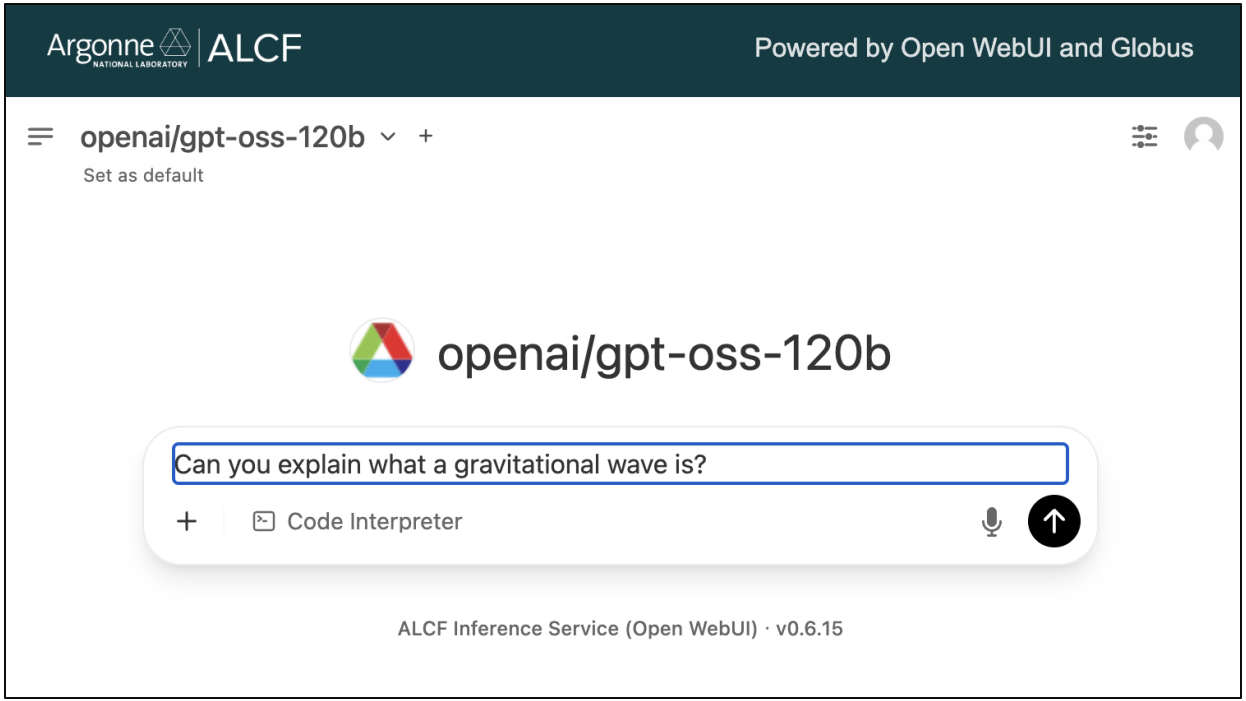
INTERFACING WITH THE INFERENCE SERVICE

Open WebUI interface
https://inference.alcf.anl.gov



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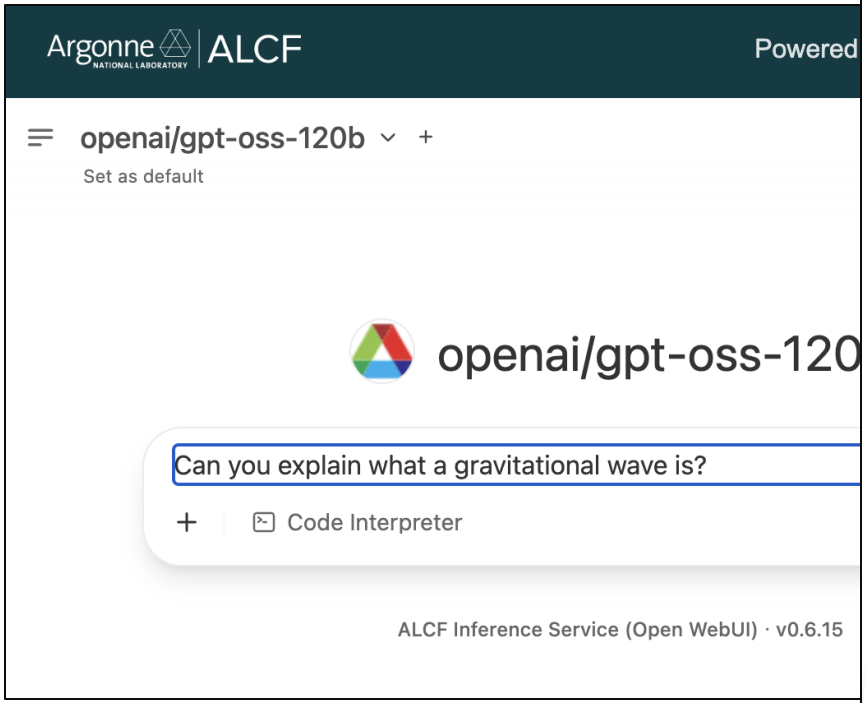

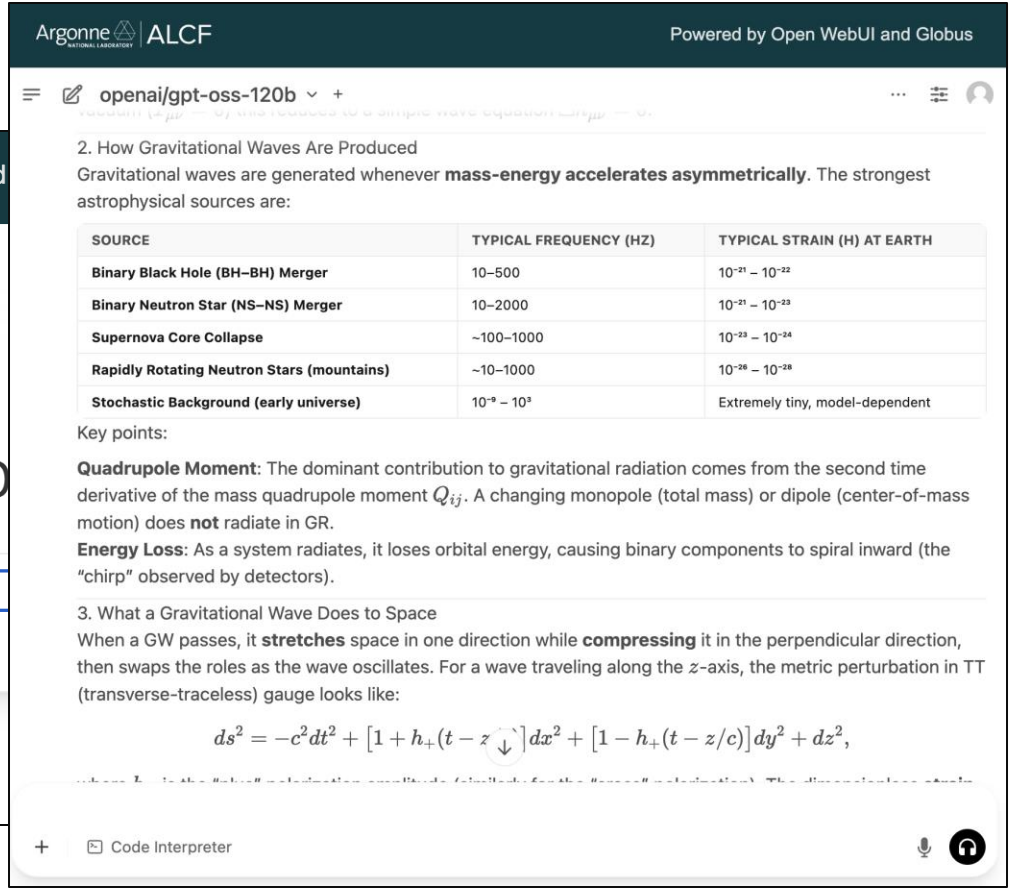

INTERFACING WITH THE INFERENCE SERVICE

OpenAI API (including batch)

https://docs.alcf.anl.gov/services/inference-endpoints

cURL | Python (OpenAI SDK)

```
#!/bin/bash

# Get your access token
access_token=$(python inference_auth_token.py get_access_token)

curl -X POST "https://inference-api.alcf.anl.gov/resource_server/sophia/vllm/v1/chat/completions" \
     -H "Authorization: Bearer ${access_token}" \
     -H "Content-Type: application/json" \
     -d '{
            "model": "meta-llama/Meta-Llama-3.1-8B-Instruct",
            "messages":[{"role": "user", "content": "Explain quantum computing in simple terms."}]
         }'
```

API Usage Examples ¶

Querying Endpoint Status

Querying Endpoint Status ›

Chat Completions

Chat Completions ›

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         }'
```

API Usage Examples ¶

Querying Endpoint Status

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Chat Completions

Chat Completions


```
{
    "id": "chatcmpl-68de443dde8b46659b4c34
    "object": "chat.completion",
    "created": 1755114580,
    "model": "meta-llama/Meta-Llama-3.1-8B
    "choices": [
        {
            "index": 0,
            "message": {
                "role": "assistant",
                "content": "Quantum computing is a new way of processing information that's
 different from the way regular computers work. Here's a simplified explanation:\n\n**Regul
ar Computers:**\n\nRegular computers use \"bits\" to store and process information. Bits ar
e like light switches that can be either ON (1) or OFF (0). When you combine these bits, yo
u get numbers, letters, and other data.\n\n**Quantum Computers:**\n\nQuantum computers use
\"qubits\" (quantum bits) to store and process information. Qubits are special because they
 can be both ON and OFF at the same time, which is called a \"superposition.\" This means a
 qubit can process multiple possibilities simultaneously, making it much faster than regula
r computers for certain tasks.\n\n**Another Key Concept: Entanglement**\n\nQubits can also
be \"entangled,\" which means that when something happens to one qubit, it instantly affect
s the other qubits, no matter how far apart they are. This allows quantum computers to perf
orm calculations on multiple qubits simultaneously, making them incredibly powerful.\n\n**H
ow Quantum Computing Works:**\n\nImagine you have a combination lock with 10 numbers. A reg
ular computer would try each number one by one, taking a long time to find the correct comb
ination. A quantum computer, on the other hand, can try all 10 numbers simultaneously, than
ks to the power of qubits and entanglement. This makes quantum computing incredibly fast fo
r certain tasks, such as:\n\n1. **Cryptography:** Breaking complex codes and encryption met
hods.\n2. **Optimization:** Finding the best solution for complex problems, like logistics
and supply chain management.\n3. **Simulation:** Simulating complex systems, like weather p
atterns and molecular interactions.\n\n**Challenges and Limitations:**\n\nQuantum computing
 is still a developing field, and there are many challenges to overcome, such as:\n\n1. **E
rror correction:** Qubits are prone to errors, which can affect the accuracy of calculation
s.\n2. **Scalability:** Currently, quantum computers are small and can only perform a limit
ed number of calculations.\n3. **Noise:** Quantum computers are sensitive to external noise
, which can disrupt calculations.\n\n**Conclusion:**\n\nQuantum computing is a revolutionar
y technology that has the potential to solve complex problems that are currently unsolvable
 or take too long to solve with regular computers. While it's still in its early stages, re
searchers and companies are working to overcome the challenges and limitations, and we can
expect to see significant advancements in the coming years.",
```

```
"usage": {
    "prompt_tokens": 43,
    "total_tokens": 436,
    "completion_tokens": 393,
    "prompt_tokens_details": null
},
"prompt_logprobs": null,
"kv_transfer_params": null,
"response_time": 3.179178237915039,
"throughput_tokens_per_second": 137.14235798428732
```

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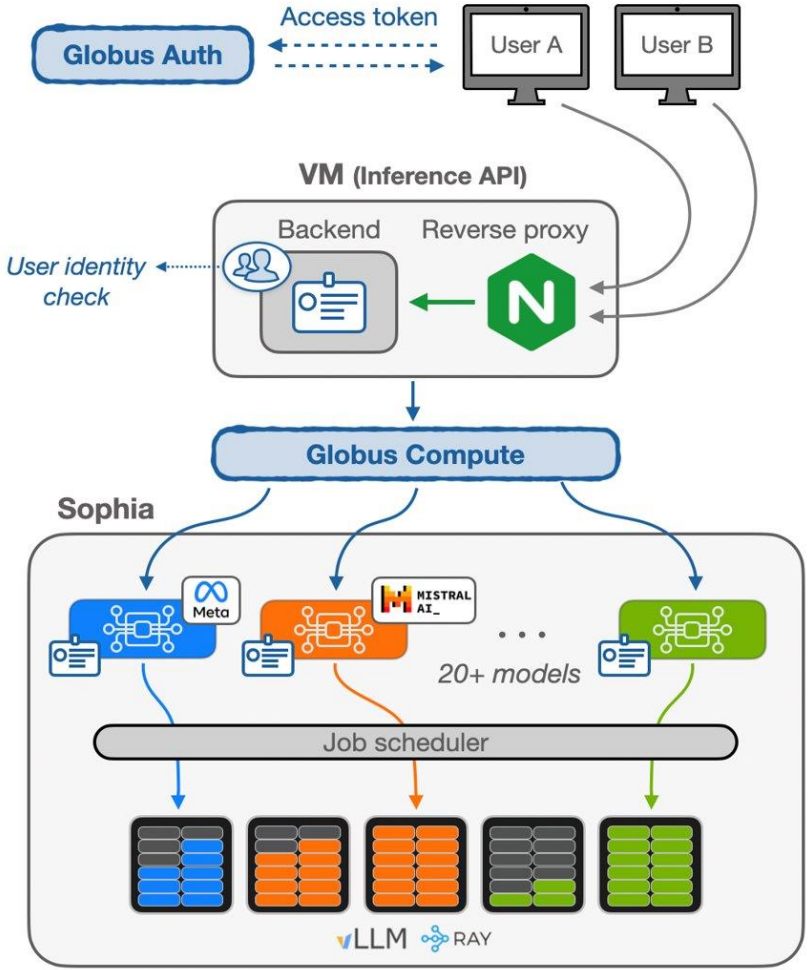
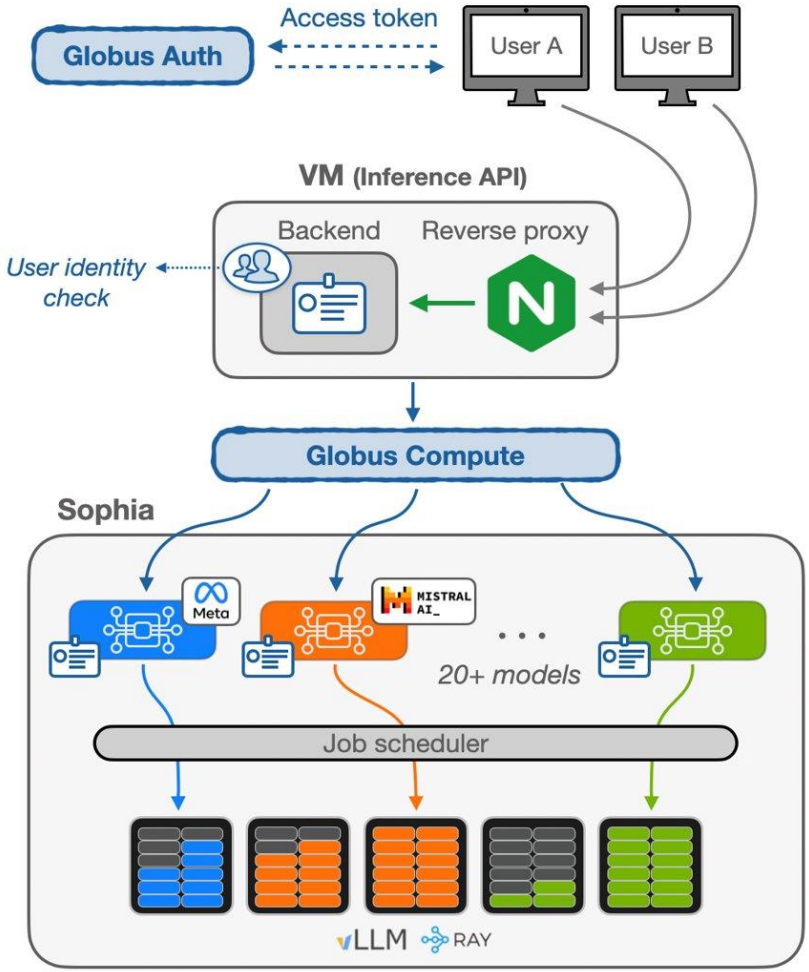
SYSTEM OVERVIEW

- Inference Service leverages ALCF computing resources to serve requests to a growing set of models
- Authentication via Globus Auth and orchestration using Globus Compute
- Combination of “in-memory/active” models and on-demand schedulable models
- Usage metrics are curated to understand and improve the service



SYSTEM COMPONENTS

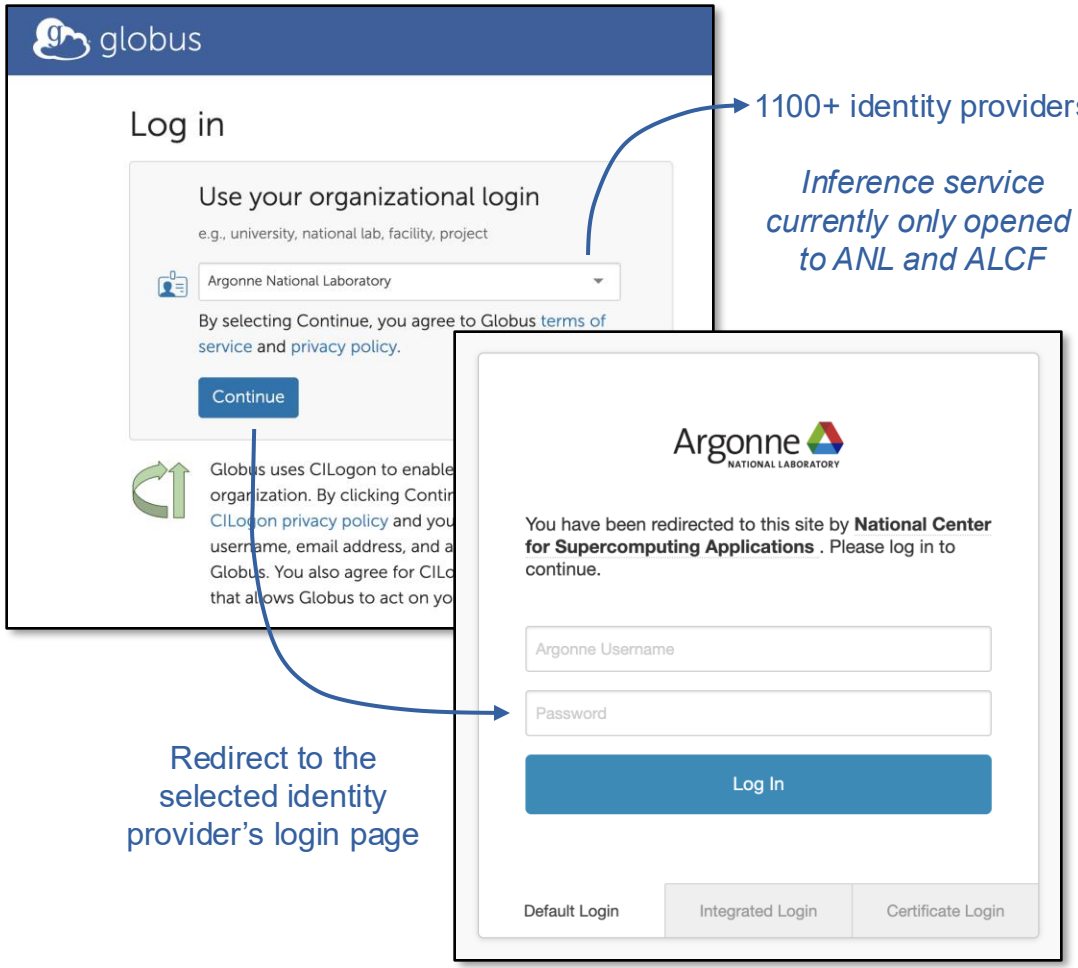
- **Globus Auth**: Enterprise-grade authentication and authorization service (OAuth2/OpenID)
- **API Gateway**: Django-Ninja async, OpenAI-compliant API handling, authorization and request routing, Postgres DB, monitoring
- **Globus Compute**: Orchestration and remote execution framework on HPC clusters
- **Compute Resources**: Compute nodes with GPUs on the ALCF Sophia cluster (more coming…)
- **Inference Backend**: High-performance inference servers (e.g., vLLM) for model serving; model weights downloaded and stored on HPC cluster



Documentation: https://docs.alcf.anl.gov/services/inference-endpoints/

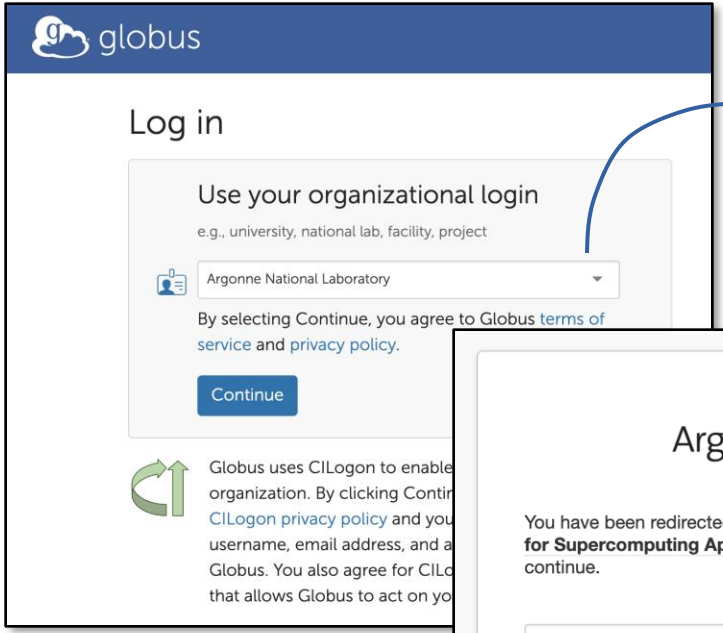
GLOBUS AUTH

- Authentication and authorization platform (OAuth2/OpenID compliant)
- Federated identity provider integrating with different institutions worldwide



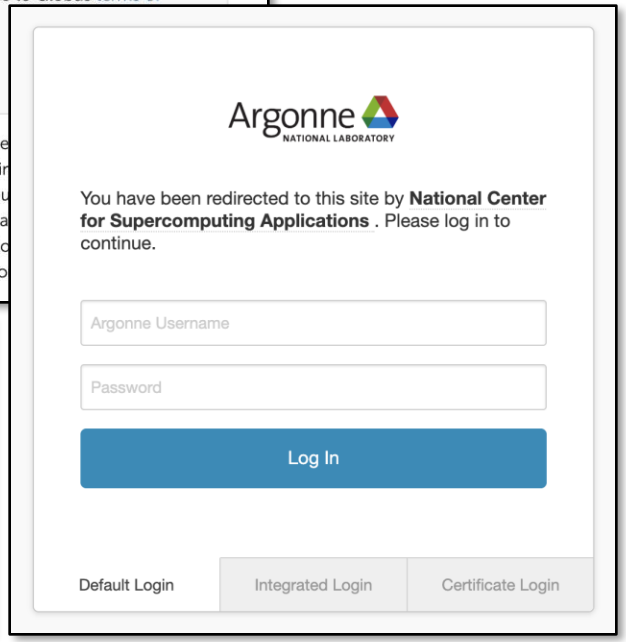
GLOBUS AUTH

- Authentication and authorization platform (OAuth2/OpenID compliant)
- Federated identity provider integrating with different institutions worldwide
- From a user's perspective:
  - Globus Auth generates a token
  - The token is passed to our inference service as an API key



1100+ identity providers

Inference service currently only opened to ANL and ALCF



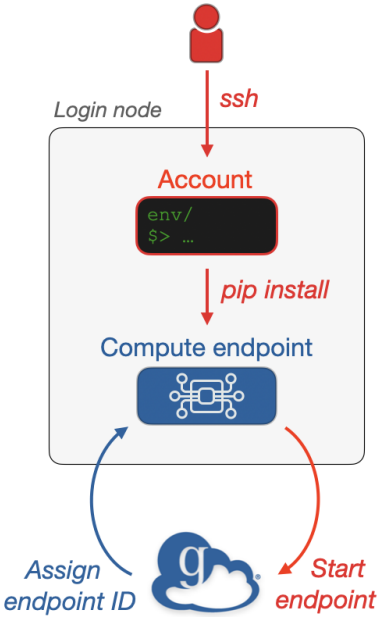

```
client = OpenAI(
    api_key=access_token,
    base_url="https://inference-api.alcf.anl.gov/resource_server/sophia/vllm/v1"
)

response = client.chat.completions.create(
    model="meta-llama/Meta-Llama-3.1-8B-Instruct",
    messages=[{"role": "user", "content": "What are the symptoms of diabetes?"}]
)
```

GLOBUS COMPUTE

Globus Compute can trigger remote analysis on HPC systems from anywhere in the world. Endpoints deployed on login nodes submit jobs to the scheduler to execute Python functions.

Install endpoint



Register function

```python
# Create Globus Compute client
from globus_compute_sdk import Client
gcc = Client()
```

The function can do whatever you want, including writing data on the filesystem or call more complex codes.

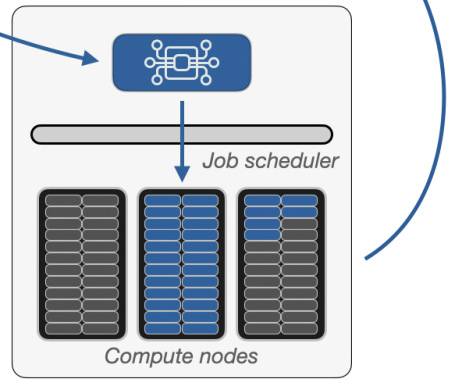
```python
# Define your analysis function
def my_analysis(arguments):

    # Import necessary modules
    import numpy as np
    import scipy

    # Do some analysis using local codes
    # ...

    # Return the computation results
    return ...
```

```python
# Register your function
function_id = gcc.register_function(my_analysis)
```

Run analysis

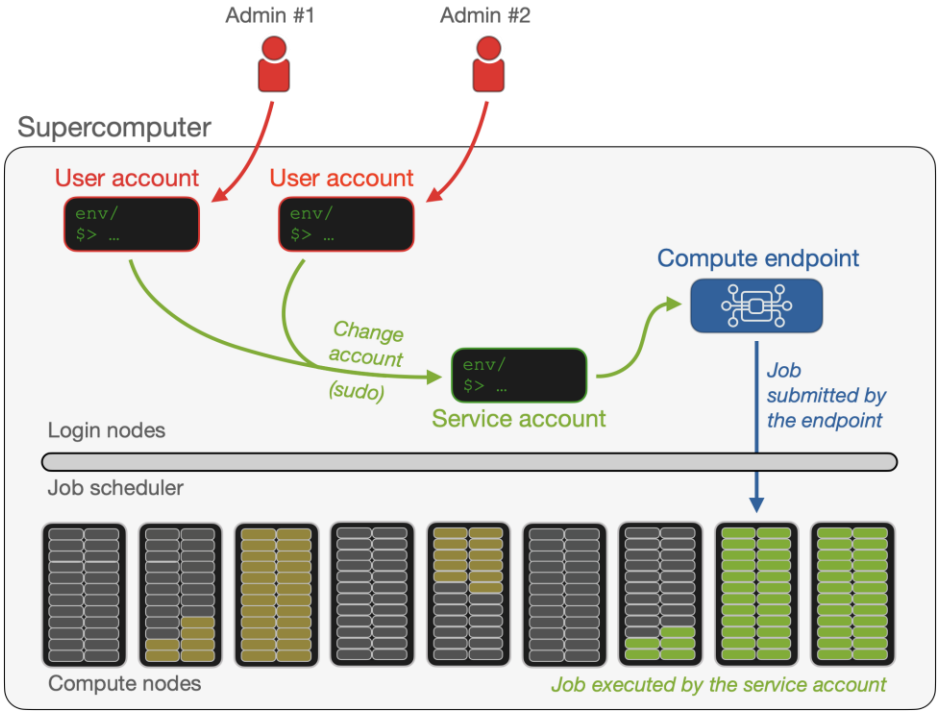
```python
# Submit a function to an endpoint
task_id = gcc.run(
    "my_arguments"
    endpoint_id=endpoint_id,
    function_id=function_id)
```

```python
# Recover results
results = gcc.get_result(task_id)
```



INFERENCE ENDPOINT CONFIGURATION

The **system administrators** deploy and configure the **compute endpoints** from an **ALCF service account**



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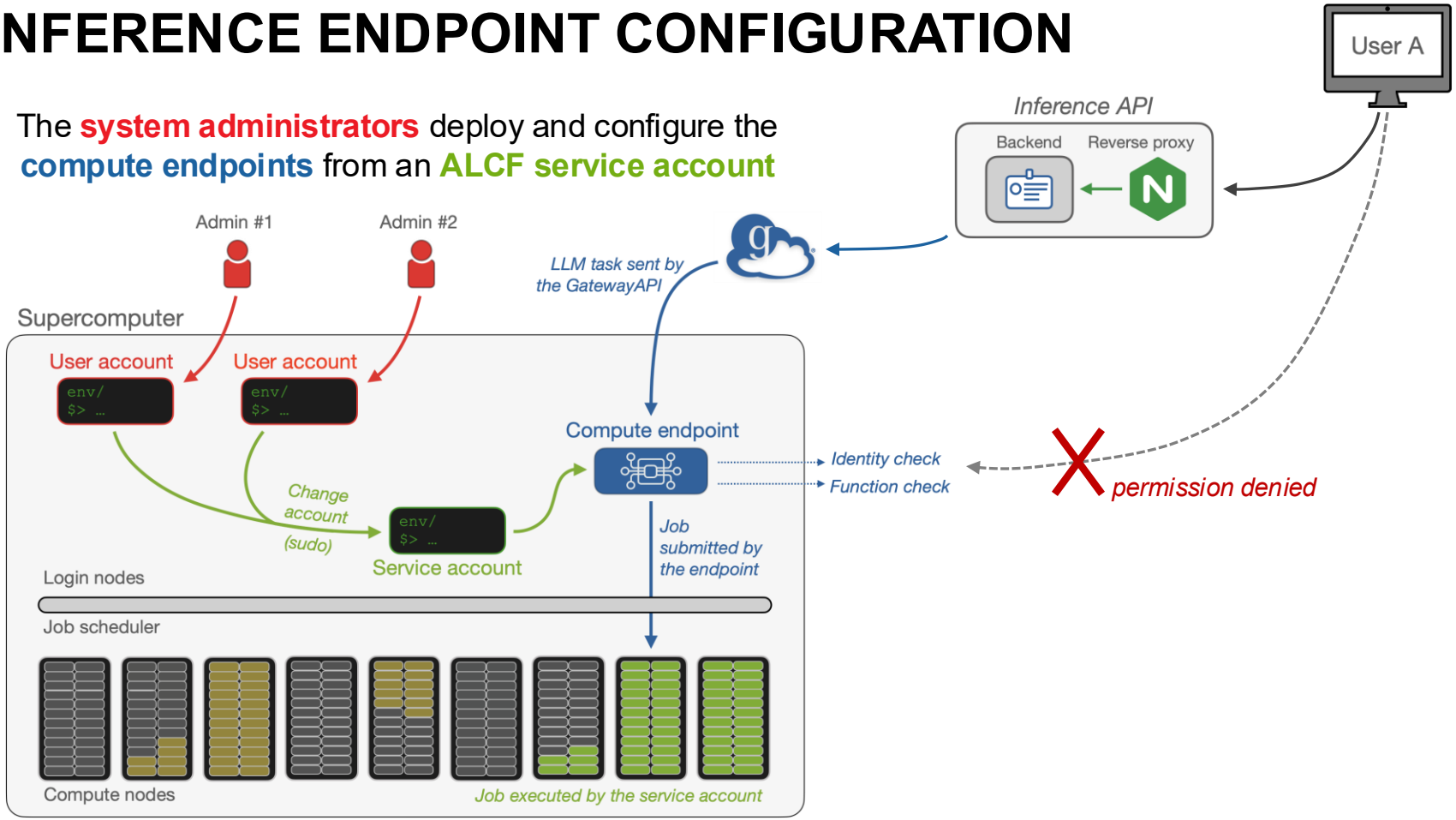

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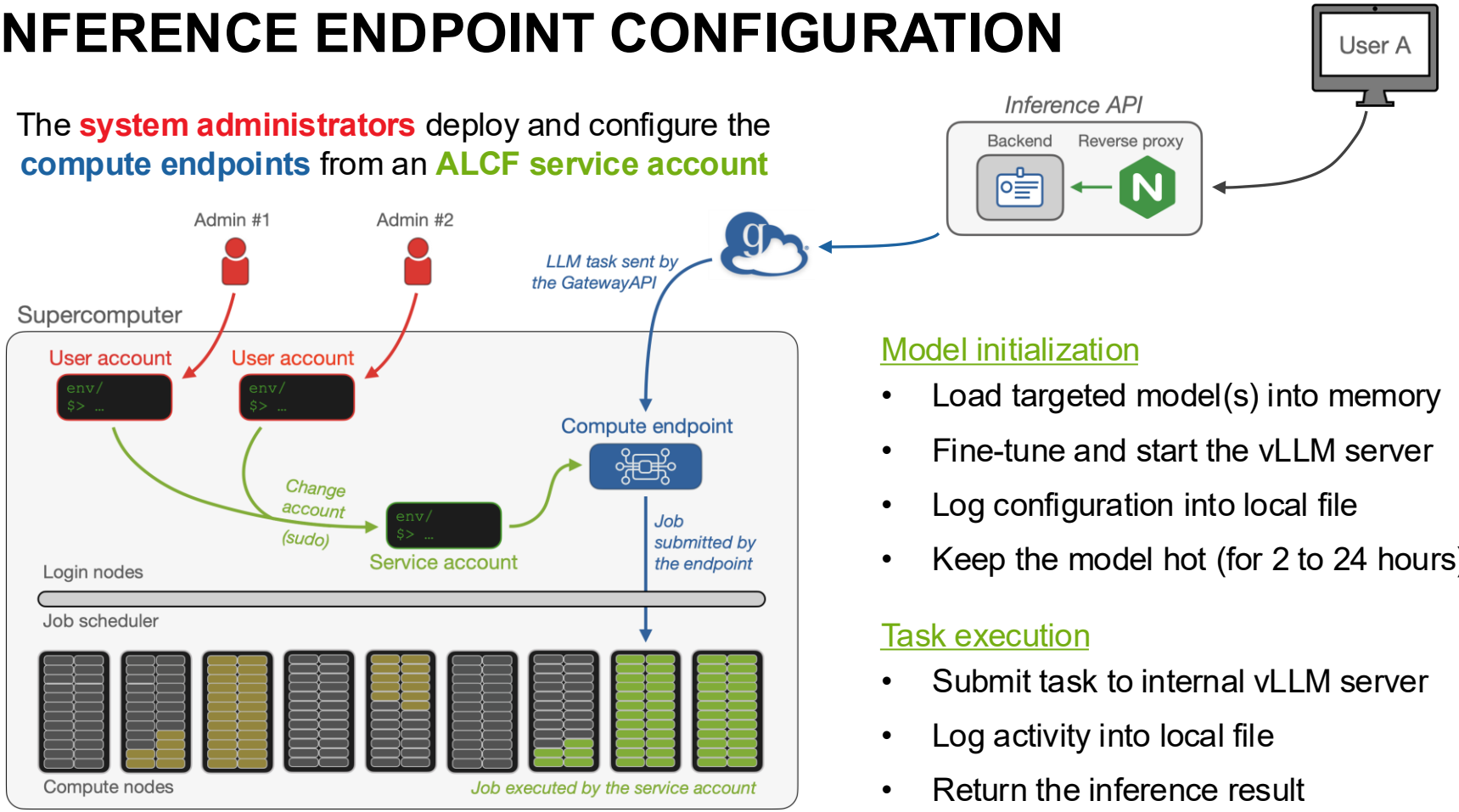

Model initialization

- Load targeted model(s) into memory
- Fine-tune and start the vLLM server
- Log configuration into local file
- Keep the model hot (for 2 to 24 hours)

Task execution

- Submit task to internal vLLM server
- Log activity into local file
- Return the inference result

AVAILABLE MODELS (30 TOTAL)

B - Batch enabled
T - Tool calling enabled
R - Reasoning enabled

Family	Models
Qwen	Qwen2.5-14B-Instruct[BT], Qwen2.5-7B-Instruct[BT], QwQ-32B[BRT], Qwen3-235B-A22B[RT], Qwen3-32B[BR]
Meta Llama	Meta-Llama-3-70B-Instruct[B], Meta-Llama-3-8B-Instruct[B], Meta-Llama-3.1-70B-Instruct[BT], Meta-Llama-3.1-8B-Instruct[BT], Meta-Llama-3.1-405B-Instruct[BT], Llama-3.3-70B-Instruct[BT], Llama-4-Scout-17B-16E-Instruct[BT], Llama-4-Maverick-17B-128E-Instruct[T]
OpenAI	gpt-oss-20b, gpt-oss-120b
Mistral	Mistral-7B-Instruct-v0.3[B], Mistral-Large-Instruct-2407[B], Mixtral-8x22B-Instruct-v0.1[B]
Nemotron	mgoin/Nemotron-4-340B-Instruct-hf
Aurora GPT	AuroraGPT-IT-v4-0125[B], AuroraGPT-Tulu3-SFT-0125[B], AuroraGPT-DPO-UFB-0225[B], AuroraGPT-7B-OI[B]
Allenai	Llama-3.1-Tulu-3-405B
Google	gemma-3-27b-it[BT]
Vision (VLM)	Qwen/Qwen2-VL-72B-InstructB, meta-llama/Llama-3.2-90B-Vision-Instruct
Embedding	nvidia/NV-Embed-v2, Salesforce/SFR-Embedding-Mistral[B], mistralai/Mistral-7B-Instruct-v0.3-embed[B]

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KEY CAPABILITIES AND FEATURES

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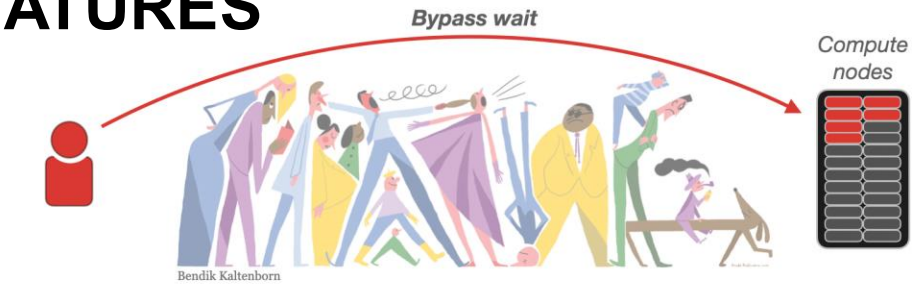
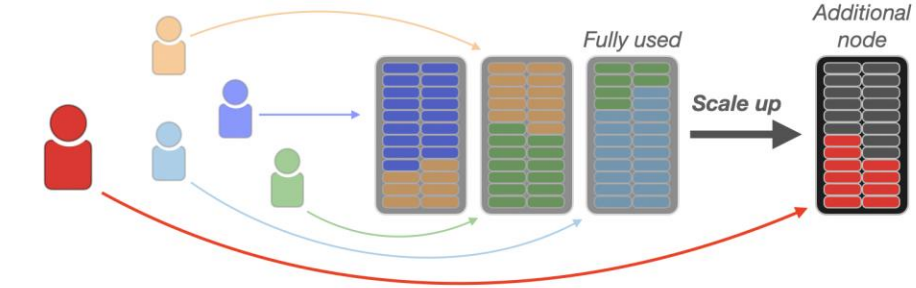


- **Auto-Scaling and Hot Nodes**: New nodes can dynamically be acquired to accommodate higher traffic. Cold models can be dynamically be loaded and kept hot for 24 hours.



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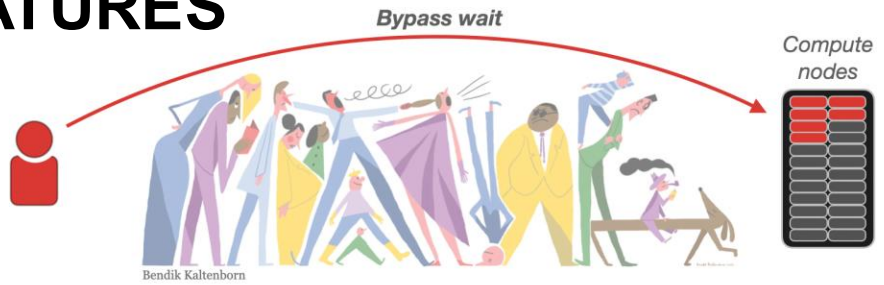

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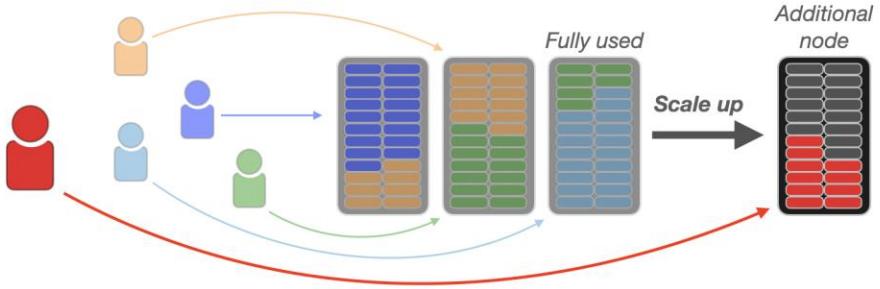
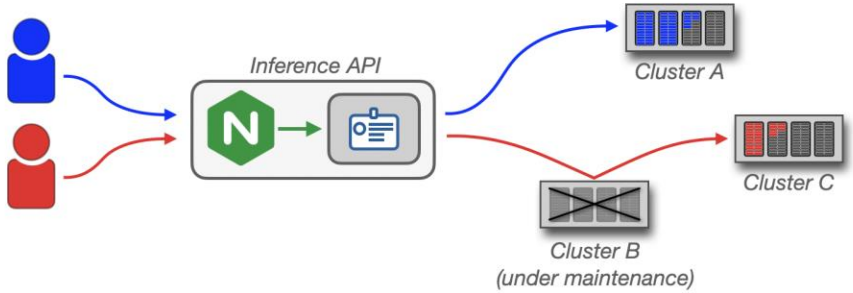


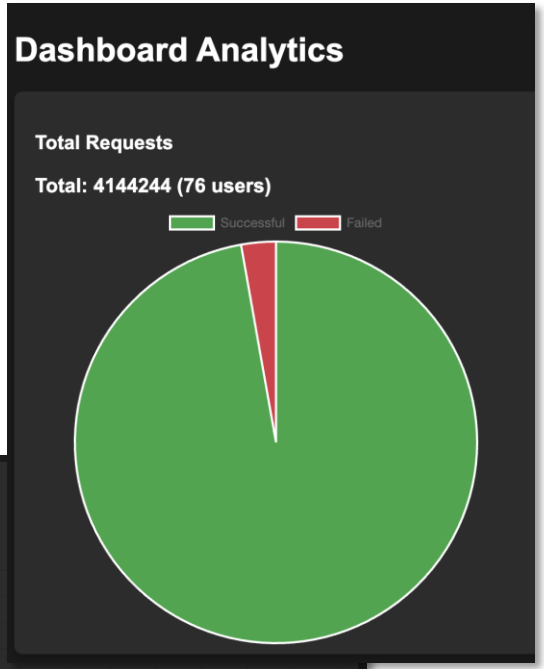
- **Multi-Backend Integration**: Our API can seamlessly route requests to diverse remote hardware, including SambaNova SN40 and Sophia inference clusters.

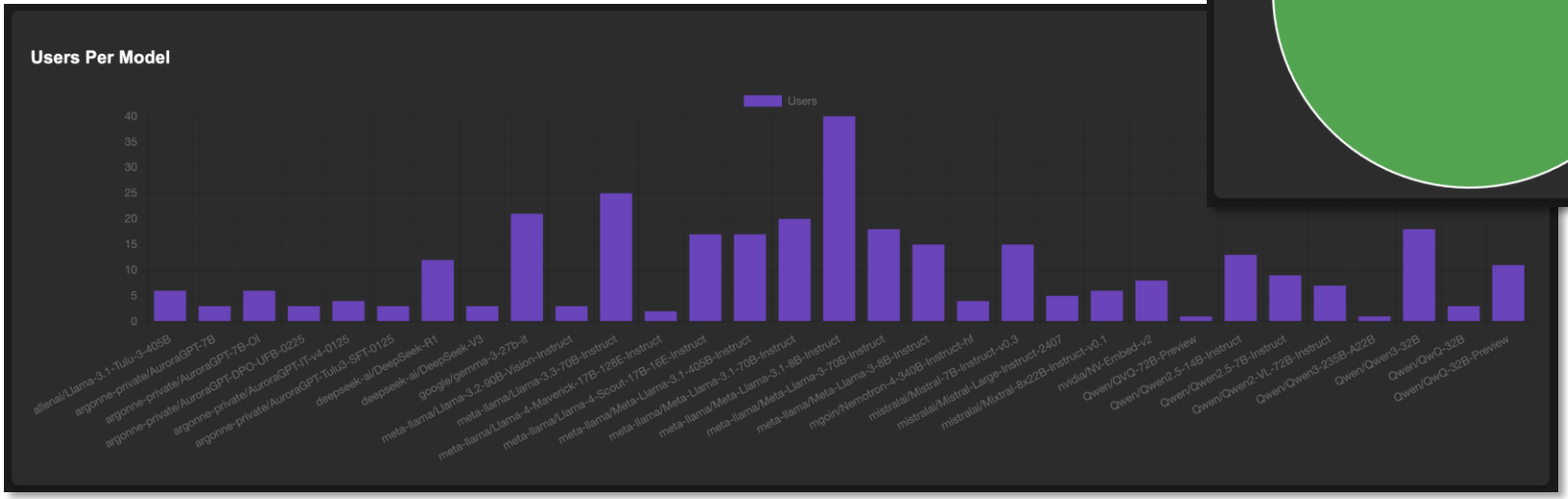


KEY CAPABILITIES AND FEATURES

- **Dashboard Monitoring**: A dashboard is available to system administrators and provides various metrics such as recent activities, number of requests and users, token throughput, and latency.

- **Current Status**: Over 8.7M requests, over 10 billion tokens generated, can generate ~3,500 tokens per second on a Sophia compute node.

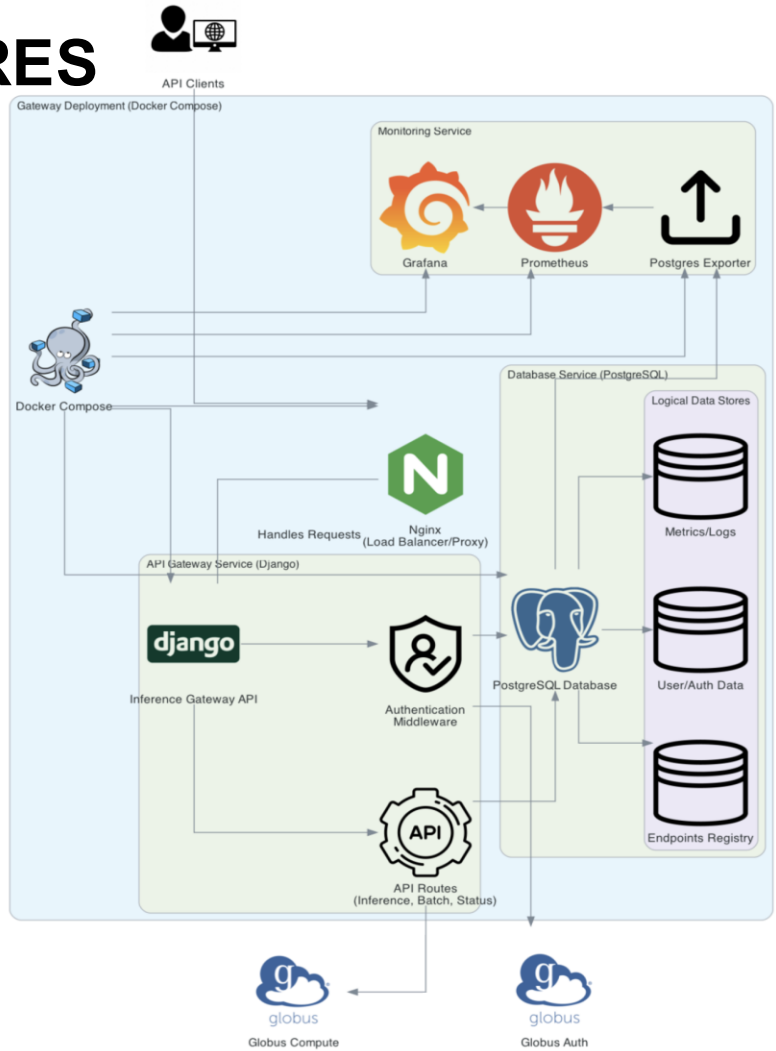




KEY CAPABILITIES AND FEATURES

- **Production Ready:** Container deployment
  - Django application
  - Gunicorn/Uvicorn + Nginx
  - PostgreSQL
  - Redis cache management
  - Comprehensive logging
  - Monitoring with Grafana and Prometheus
  - Globus integration

- **Benchmarking**: Built-in load testing tools
  - Request throughput
  - Token throughput
  - Latency



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  - Entry points to our inference service
  - Motivation behind our development
- **ALCF Inference Service Architecture**
  - Overview of the system components
  - Authentication and authorization
  - Orchestration and configuration
  - Available models
- **Capabilities and Features**
  - Latency, scaling, federated endpoints
  - Monitoring, production-ready with containers
- **Usage and Examples**
  - How to use the API (Python, cURL, agentic workflows)
  - How to use the web interface
  - Science use cases

USAGE: AUTHENTICATION

- All API requests require a Globus access token using **ANL or ALCF credentials**.
- Download the helper script: `wget https://raw.githubusercontent.com/argonne-lcf/inference-endpoints/main/inference_auth_token.py`
- Requires: `pip install globus-sdk`
- **Token Validity**: 48 hours, but `get_access_token` auto-refreshes for up to 7 days
- **Troubleshooting**: If auth errors occur, visit https://app.globus.org/logout and re-authenticate with `--force`

USAGE: AUTHENTICATION (CODE)

```
# Authenticate (first time or when token expires)
python inference_auth_token.py authenticate --force

# Get a valid access token
export MY_TOKEN=$(python inference_auth_token.py get_access_token)
```

CHECKING SYSTEM STATUS

- **Check running models and jobs**: See which models are currently live and available
- **List all available endpoints**: Get information about all configured endpoints
- These commands help you understand what's currently available before making requests

CHECKING RUNNING JOBS

```
# Check running jobs and models on the cluster
curl -X GET "https://inference-api.alcf.anl.gov/resource_server/sophia/jobs" \
-H "Authorization: Bearer $MY_TOKEN"
```


```
{ "running": [ { "Models": "meta-llama/Llama-4-Scout-17B-16E-Instruct",
"Framework": "vllm", "Cluster": "sophia", "Model Status": "running", "Job ID":
"80514.sophia-pbs-01", "Job State": "R", "Host Name": "sophia-gpu-15/0*256",
"Job Comments": "Job run at Mon Aug 11 at 20:52 on (sophia-gpu-
15:ncpus=256:ngpus=8:mem=1006632960kb)", "Nodes Reserved": "1", "Walltime":
"67:43:56" } , "queued": [], "others": [], "private-batch-running": [],
"private-batch-queued": [], "cluster_status": { "free_nodes": 4 } }
```

LIST ALL AVAILABLE ENDPOINTS

```
# Check running jobs and models on the cluster
curl -X GET "https://inference-api.alcf.anl.gov/resource_server/list-endpoints" -H "Authorization: Bearer $MY_TOKEN"
```


```
{"clusters": {"sophia": {"base_url":
"/resource_server/sophia","frameworks": {"vllm": {"models": ["Qwen/QwQ-32B"],"endpoints": {"chat": "/vllm/v1/chat/completions/","embedding":
"/vllm/v1/embeddings/"}},
 "infinity": {"models": ["nvidia/NV-Embed-v2"]}}}},"polaris": {"base_url":
"/resource_server/polaris","frameworks": {"vllm": {"models": ["meta-llama/Meta-Llama-3-70B-Instruct"],"endpoints": {"chat":
"/vllm/v1/chat/completions/","completion": "/vllm/v1/completions/",
"embedding": "/vllm/v1/embeddings/"}}
```

EXAMPLE: CHAT COMPLETION WITH CURL

- Use the `/v1/chat/completions` endpoint for interactive queries.
- Provide the model name and a series of messages.
- This is ideal for testing and simple command-line interactions.

EXAMPLE: CHAT COMPLETION WITH CURL (CODE)

```
curl -X POST https://inference-
api.alcf.anl.gov/resource_server/v1/chat/completions
\\
      -H "Authorization: Bearer $MY_TOKEN" \\
      -H "Content-Type: application/json" \\
      -d '{
        "model": "meta-llama/Meta-Llama-3.1-8B-
Instruct",
        "messages": [
          {"role": "user", "content": "Explain Globus
Compute in simple terms."}
        ],
        "max_tokens": 150
      }'
```

EXAMPLE: CHAT COMPLETION WITH PYTHON

- Programmatic access is easy with Python's `requests` library.
- This allows for integration into larger applications and workflows.
- Remember to handle the response, which will be in JSON format.

EXAMPLE: CHAT COMPLETION WITH PYTHON (CODE)

```python
import requests
from inference_auth_token import get_access_token

access_token = get_access_token()
headers = { 'Authorization': f'Bearer {access_token}' }
url = "https://inference-
api.alcf.anl.gov/resource_server/v1/chat/completions"

payload = {
    "model": "meta-llama/Meta-Llama-3.1-8B-Instruct",
    "messages": [{"role": "user", "content": "Explain Globus
Compute in simple terms."}]
}

response = requests.post(url, headers=headers, json=payload)
print(response.json())
```

EXAMPLE: USING THE OPENAI SDK

- The endpoints are compatible with the official OpenAI Python library.
- Set the `api_key` to your access token and the `base_url` to the ALCF endpoint.
- This provides a familiar and powerful interface for interacting with the models.

EXAMPLE: USING THE OPENAI SDK (CODE)

```
from openai import OpenAI
from inference_auth_token import get_access_token

client = OpenAI(
    api_key=get_access_token(),
    base_url="https://inference-
api.alcf.anl.gov/resource_server/sophia/vllm/v1"
)

response = client.chat.completions.create(
    model="meta-llama/Meta-Llama-3.1-8B-Instruct",
    messages=[{"role": "user", "content": "Explain quantum computing"}]
)
print(response)
```

EXAMPLE: VISION LANGUAGE MODEL (VLM)

- Send image data along with text prompts to Vision Language Models.
- The image must be base64 encoded.
- This enables powerful multi-modal analysis of visual data.

EXAMPLE: VISION LANGUAGE MODEL (VLM) (CODE)

```python
from openai import OpenAI
import base64
from inference_auth_token import get_access_token

client = OpenAI(
    api_key=get_access_token(),
    base_url="https://inference-api.alcf.anl.gov/resource_server/sophia/vllm/v1"
)

# Function to encode image to base64
def encode_image(image_path):
    with open(image_path, "rb") as image_file:
        return base64.b64encode(image_file.read()).decode('utf-8')

base64_image = encode_image("scientific_diagram.png")

response = client.chat.completions.create(
    model="Qwen/Qwen2-VL-72B-Instruct",
    messages=[{"role": "user", "content": [
        {"type": "text", "text": "Describe this scientific diagram"},
        {"type": "image_url", "image_url": {"url": f"{base64_image}"}}
    ]}]
)
```

EXAMPLE: EMBEDDING MODELS

- Generate numerical representations (embeddings) of text for tasks like semantic search or clustering.
- Use the `/embeddings` endpoint. Note that some models may use a different framework endpoint (e.g. `infinity`).

EXAMPLE: EMBEDDING MODELS (CODE)

```
from openai import OpenAI
from inference_auth_token import get_access_token

client = OpenAI(
    api_key=get_access_token(),
    # Note the different base URL for this embedding model framework
    base_url="https://inference-
api.alcf.anl.gov/resource_server/sophia/vllm/v1"
)

embedding = client.embeddings.create(
  model="nvidia/NV-Embed-v2",
  input="The food was delicious and the waiter was friendly.",
  encoding_format="float"
)
print(embedding)
```

EXAMPLE: BUILDING AN AGENT WITH LANGGRAPH

- Combine LLMs with custom tools to create powerful, automated agents.
- LangGraph's `create_react_agent` can build an agent that uses tools to answer questions.
- This example creates a chemistry agent that can look up molecule structures.

EXAMPLE: BUILDING AN AGENT WITH LANGGRAPH (CODE)

```python
from langchain_openai import ChatOpenAI
from langchain_core.tools import tool
from langgraph.prebuilt import create_react_agent
import pubchempy


llm = ChatOpenAI(  # Initialize Model
    model="meta-llama/Meta-Llama-3.3-70B-Instruct",
    base_url="https://inference-api.alcf.anl.gov/resource_server/sophia/vllm/v1",
    api_key=get_access_token()
)


@tool # Define Tool
def molecule_name_to_smiles(name: str) -> str:
    """Convert a molecule name to its SMILES format."""
    return pubchempy.get_compounds(str(name), "name")[0].canonical_smiles

chem_graph = create_react_agent(llm, tools=[molecule_name_to_smiles]) # Create Agent
inputs = {"messages": [("user", "What is the SMILES string for Carbon Dioxide?")]}


for s in chem_graph.stream(inputs, stream_mode="values"): # Call Local Tool + Remote Model
    print(s["messages"][-1])
```

USAGE: BATCH PROCESSING

- For large-scale inference on many prompts.
- Submit a JSON Lines (`.jsonl`) file containing your requests.
- The system processes these requests asynchronously as a single job.
- This is highly efficient for large datasets and avoids rate-limiting issues.

EXAMPLE: CREATING A BATCH JOB

- Use the `/v1/batches` endpoint to submit a batch job.
- Specify the model and the path to your input file on a shared filesystem.
- The file path must be accessible by the remote compute endpoint.

BATCH JOB INPUT FORMAT (JSONL EXAMPLE)

```
{"custom_id": "req-1", "method": "POST", "url": "/v1/chat/completions",
"body": {"model": "meta-llama/Meta-Llama-3.1-8B-Instruct", "messages":
[{"role": "user", "content": "Analyze this protein sequence:
MKTVRQERLKS..."}], "max_tokens": 500}}
{"custom_id": "req-2", "method": "POST", "url": "/v1/chat/completions",
"body": {"model": "meta-llama/Meta-Llama-3.1-8B-Instruct", "messages":
[{"role": "user", "content": "What are the implications of climate change on
Arctic ecosystems?"}], "max_tokens": 300}}
{"custom_id": "req-3", "method": "POST", "url": "/v1/chat/completions",
"body": {"model": "meta-llama/Meta-Llama-3.1-8B-Instruct", "messages":
[{"role": "user", "content": "Explain quantum entanglement in simple
terms."}], "max_tokens": 200}}
```

EXAMPLE: CREATING A BATCH JOB (CODE)

```
# The base URL points to the batch processing endpoint
base_url="https://inference-api.alcf.anl.gov/resource_server/v1/batches"

# Submit a batch job with the model and input file
curl -X POST "$base_url" \\
     -H "Authorization: Bearer $MY_TOKEN" \\
     -H "Content-Type: application/json" \\
     -d '{
           "model": "meta-llama/Meta-Llama-3.1-8B-Instruct",
           "input_file": "/path/on/shared/storage/my_prompts.jsonl"
         }'
```

EXAMPLE: CHECKING BATCH STATUS

- Monitor the progress of your submitted job using its `batch_id`.
- The status can be `pending`, `running`, `completed`, or `failed`.
- This allows you to track long-running jobs without keeping a connection open.

EXAMPLE: CHECKING BATCH STATUS (CODE)

```
# Replace with the actual ID of your submitted batch job
batch_id="your-batch-id"

# Query the status of a specific batch job
curl -X GET "https://inference-
api.alcf.anl.gov/resource_server/v1/batches/${batch_id}" \\
     -H "Authorization: Bearer $MY_TOKEN"
```

EXAMPLE: RETRIEVING BATCH STATUS

- Retrieve the results from submitted job using its `batch_id`.
- You will be provided a results_file, progress_file and metrics

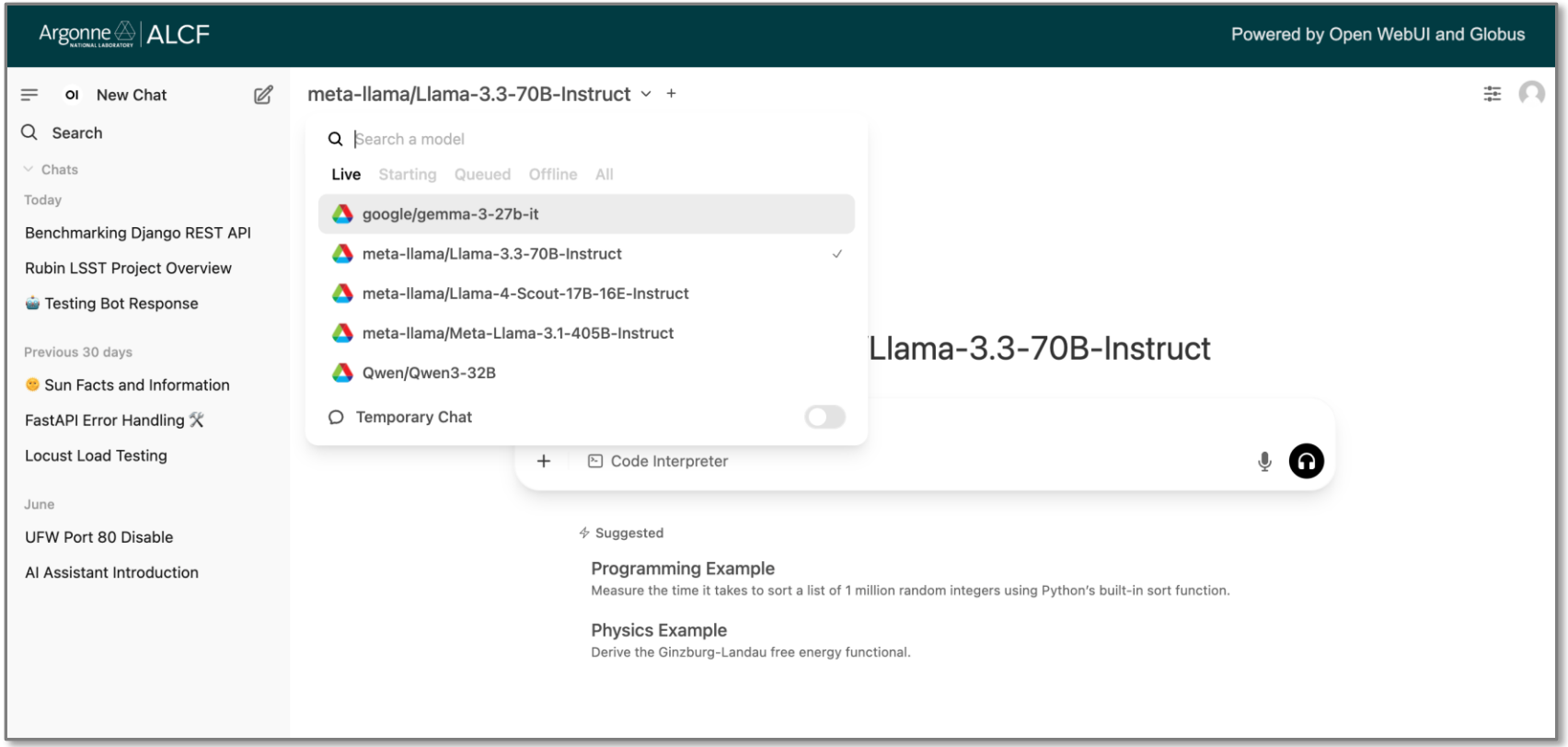
EXAMPLE: RETRIEVING BATCH RESULT(CODE)

```
# Replace with the actual ID of your submitted batch job
batch_id="your-batch-id"

# Return the results of a specific batch job
curl -X GET "https://inference-
api.alcf.anl.gov/resource_server/v1/batches/${batch_id}/result" \\
     -H "Authorization: Bearer $MY_TOKEN"
```

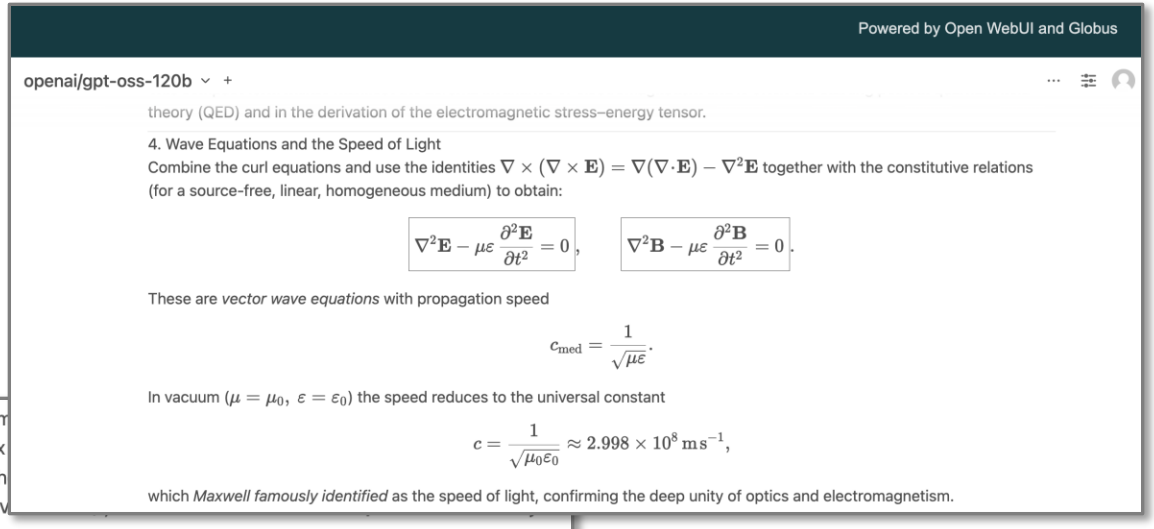
INTERACTIVE CHAT UI

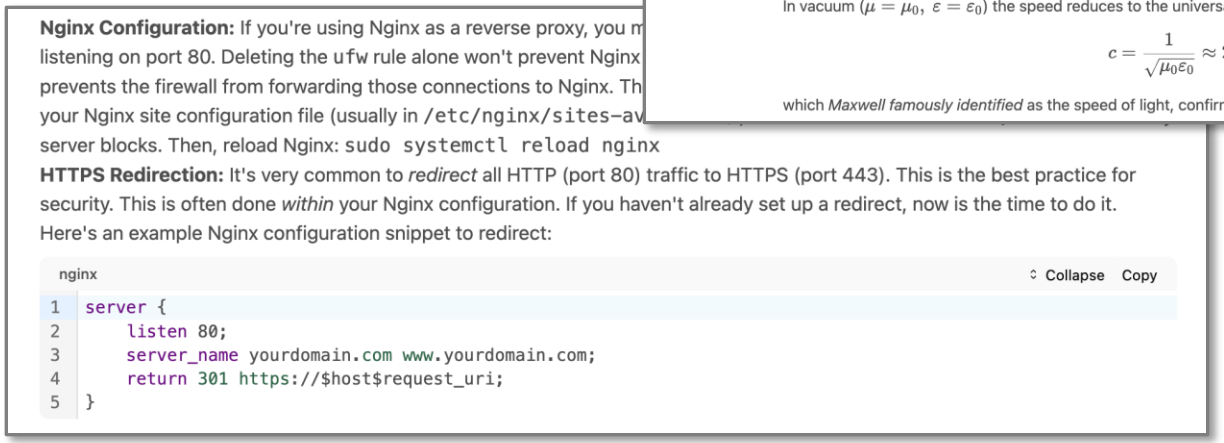
URL: https://inference.alcf.anl.gov/



INTERACTIVE CHAT UI

- Based on WebUI project
- Preserves chat history
- Can compare models directly
- Format equations and codes
- Integrates with Inference API
- Integrates with Globus

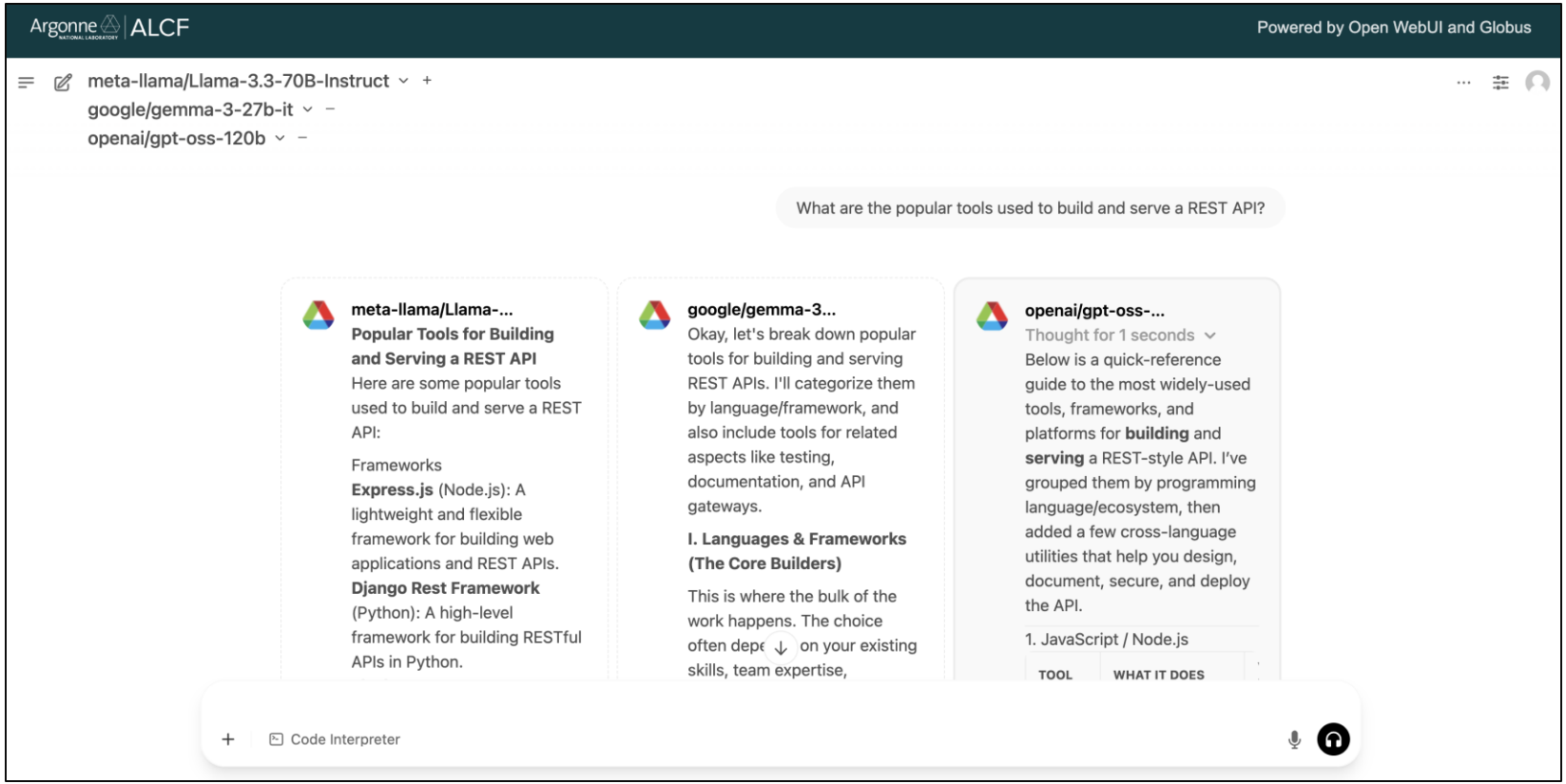




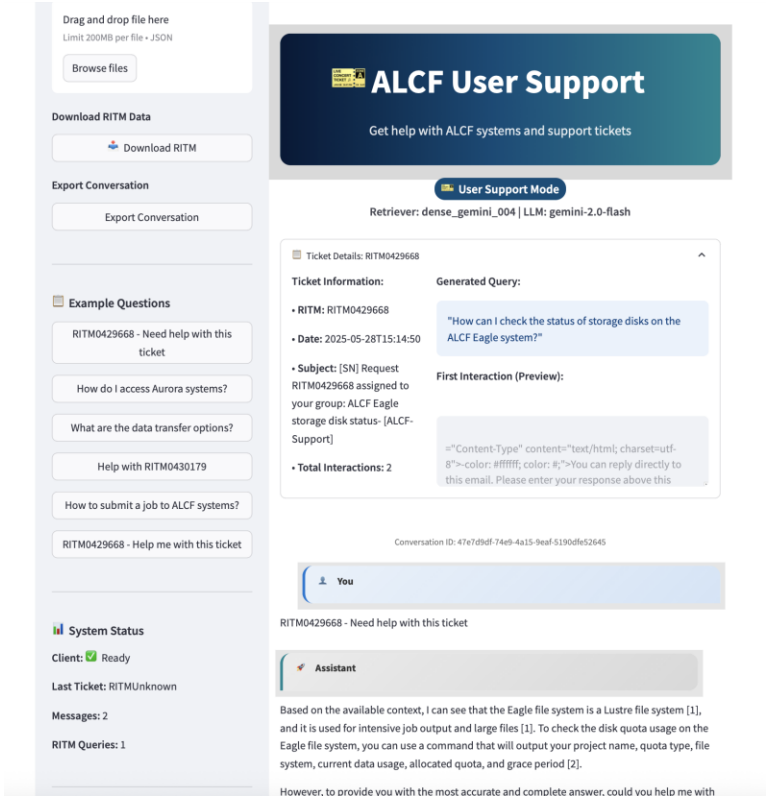
Streaming enabled

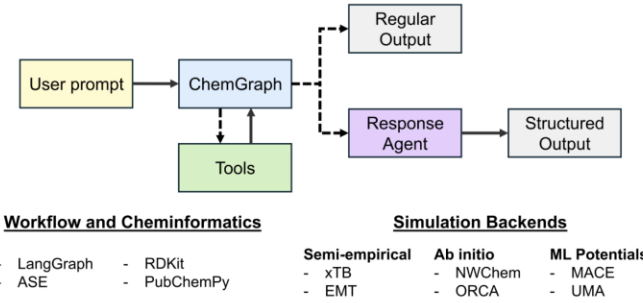
INTERACTIVE CHAT UI

URL: https://inference.alcf.anl.gov/

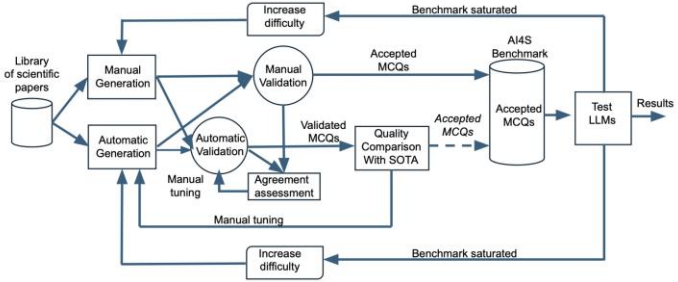


SOME INFERENCE SERVICE USE-CASES





ChemGraph – Thang et. al
https://www.arxiv.org/pdf/2506.06363



AuroraGPT-EAIRA – Capello et. al (AGIL framework)
https://arxiv.org/pdf/2502.20309

Largest usage is currently for generating synthetic data for science

CONCLUSION

ALCF Inference Endpoints democratize LLM access for scientific research by:

- Providing seamless access to 20+ cutting-edge models
- Supporting diverse use cases: chat, vision, embeddings, agents, and batch processing
- Integrating with multiple HPC backends for optimal performance
- Auto scaling based on request workload

Web Interface: https://inference.alcf.anl.gov/

Documentation: https://docs.alcf.anl.gov/services/inference-endpoints/

Contact: support@alcf.anl.gov

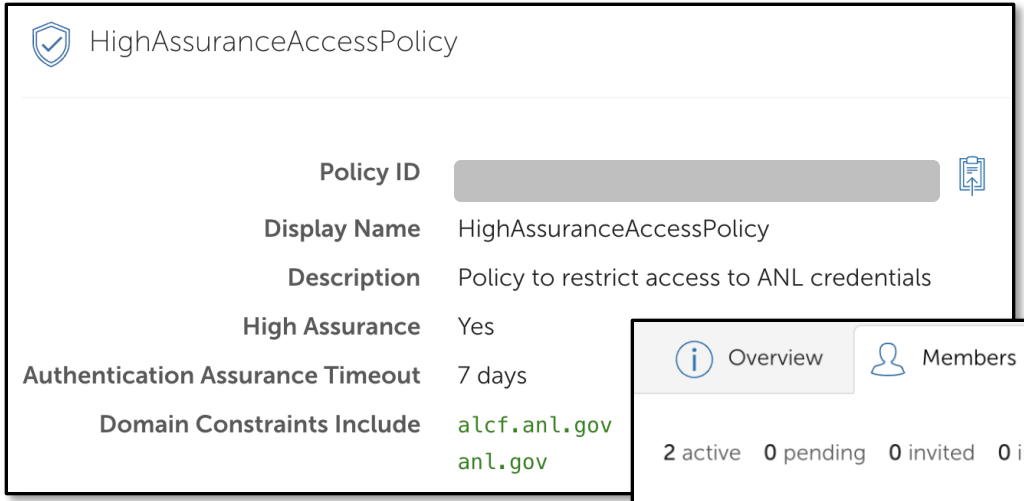
THANK YOU

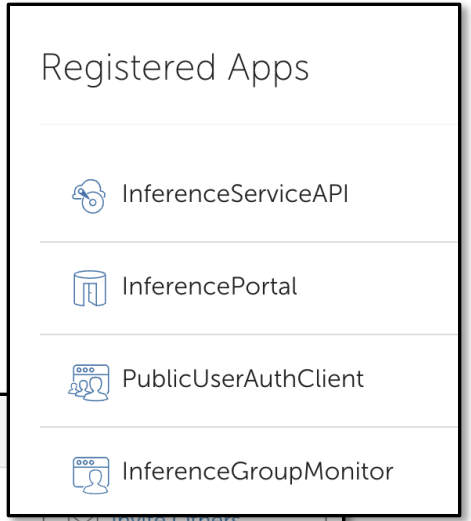
BACKUP SLIDES

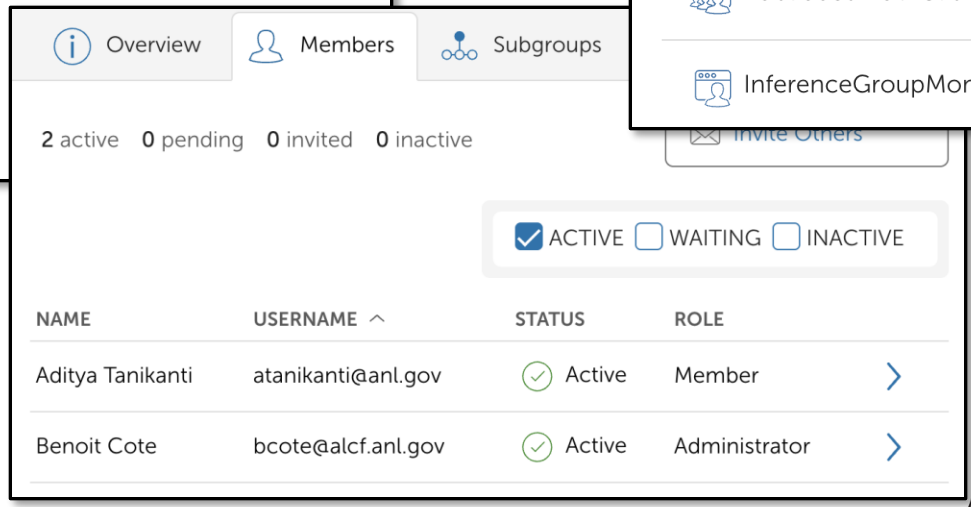
GLOBUS AUTH (FROM AN ADMIN PERSPECTIVE)

Clients operate the service without human intervention

Policies define which institutions can use the service







Groups provide role-base access control to private models