

SimDK

a **Hyper9** Production
directed by **Andrew Kutz**

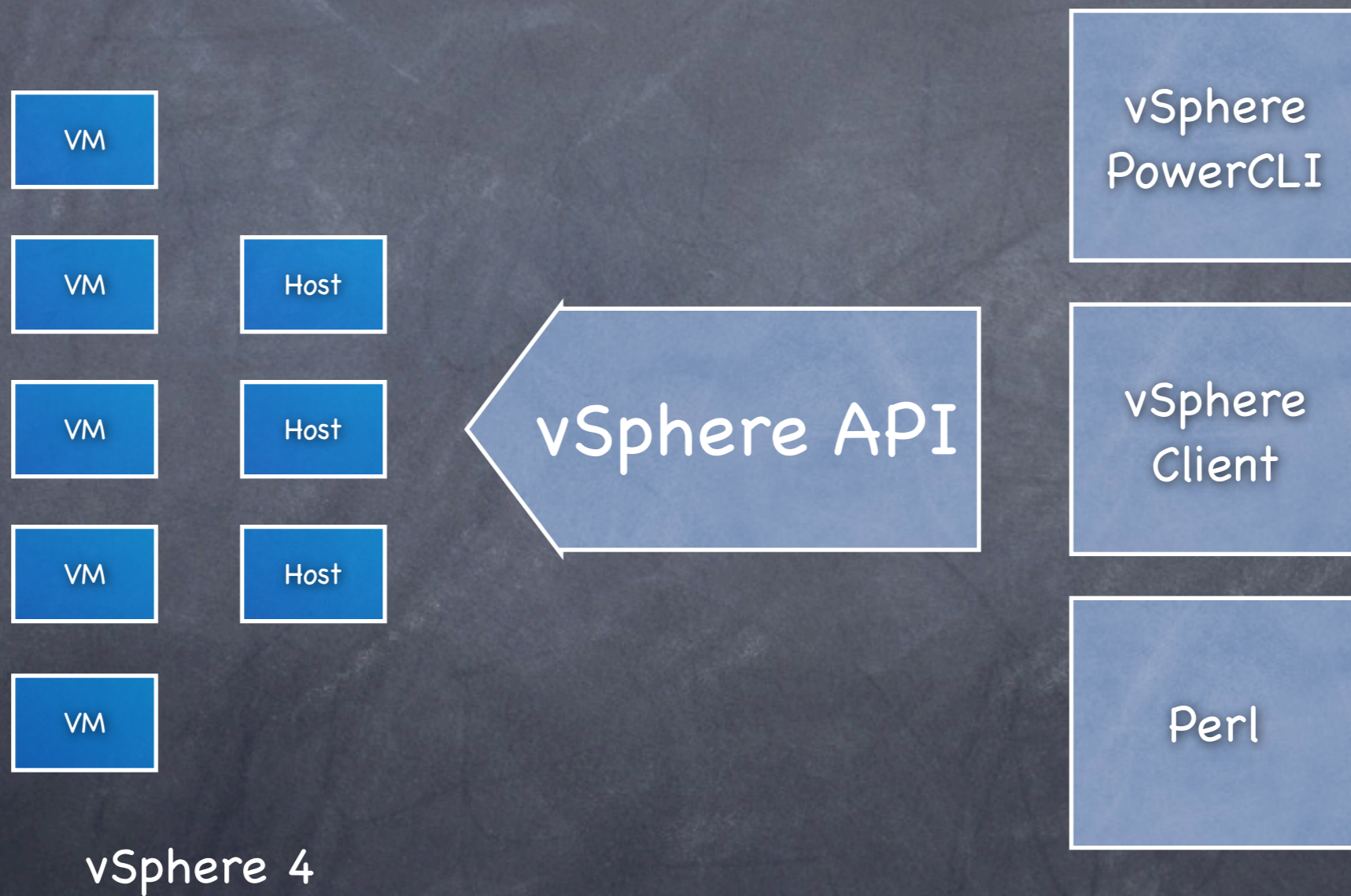
Agenda

- Summary
- Simulation and Emulation
- Architecture

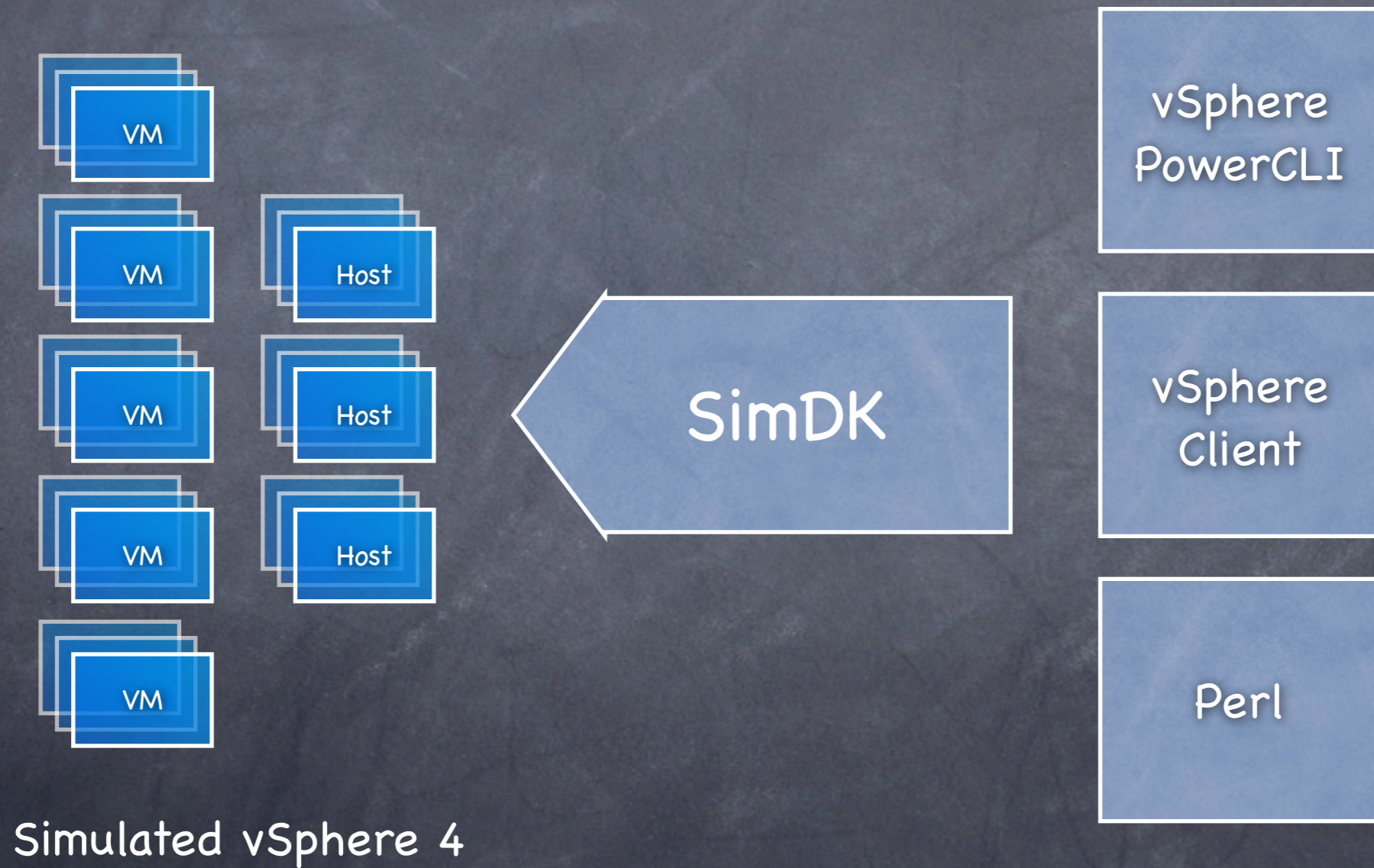
Summary

- SimDK is **virtual virtualization** -- a software package that enables the **simulation** and **emulation** of the major players in the enterprise, virtualization market.

Simulation and Emulation



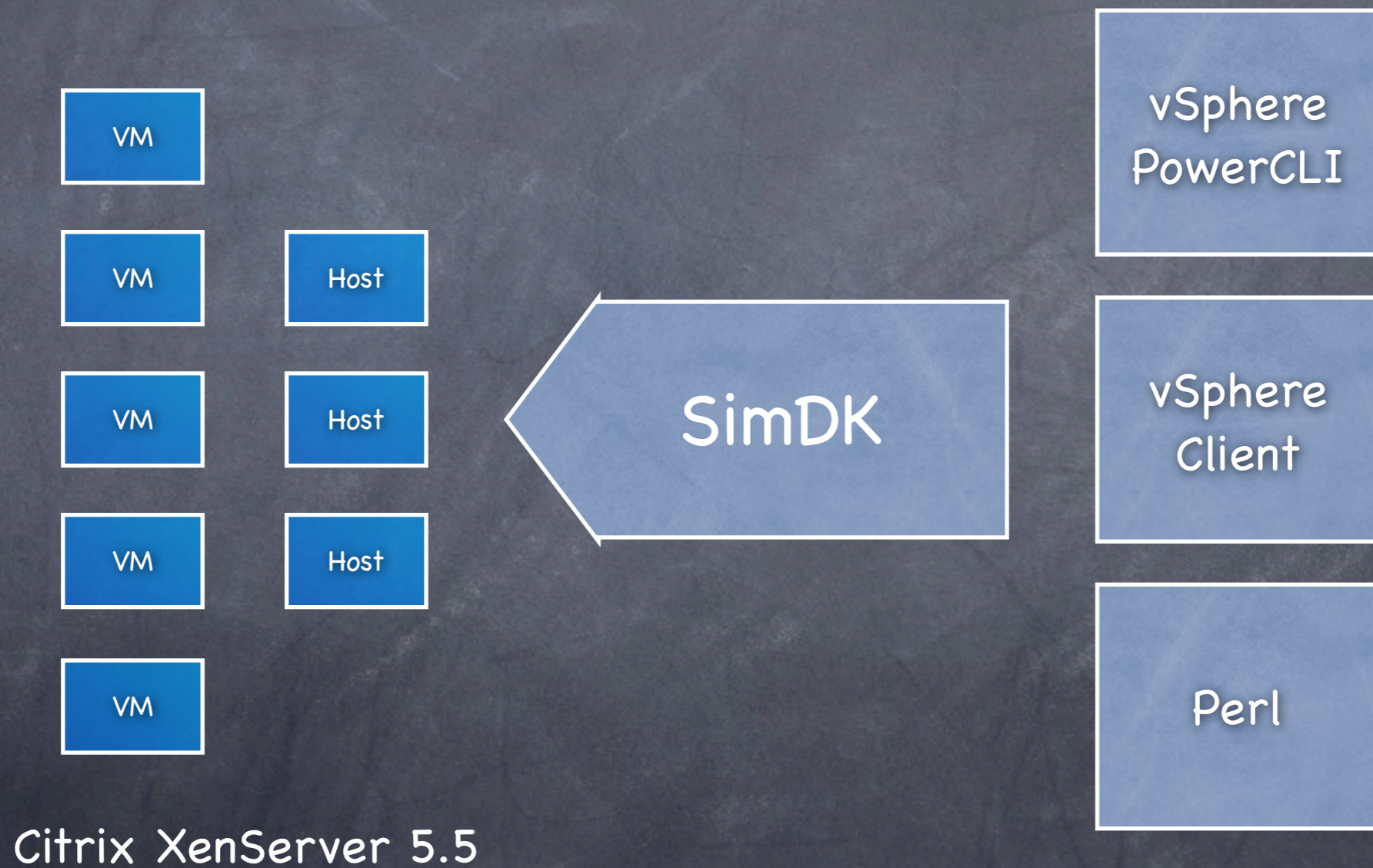
Simulated VMware



Simulation Uses

- QA and Testing
- API Compatibility Testing
- Load and Scale Testing

Emulated Xen



Emulation Uses

- Simplify multi-platform compatibility
- Reuse of proven management tools
- Reuse of proven best practices

Architecture

- SimDK uses proven, enterprise technology.

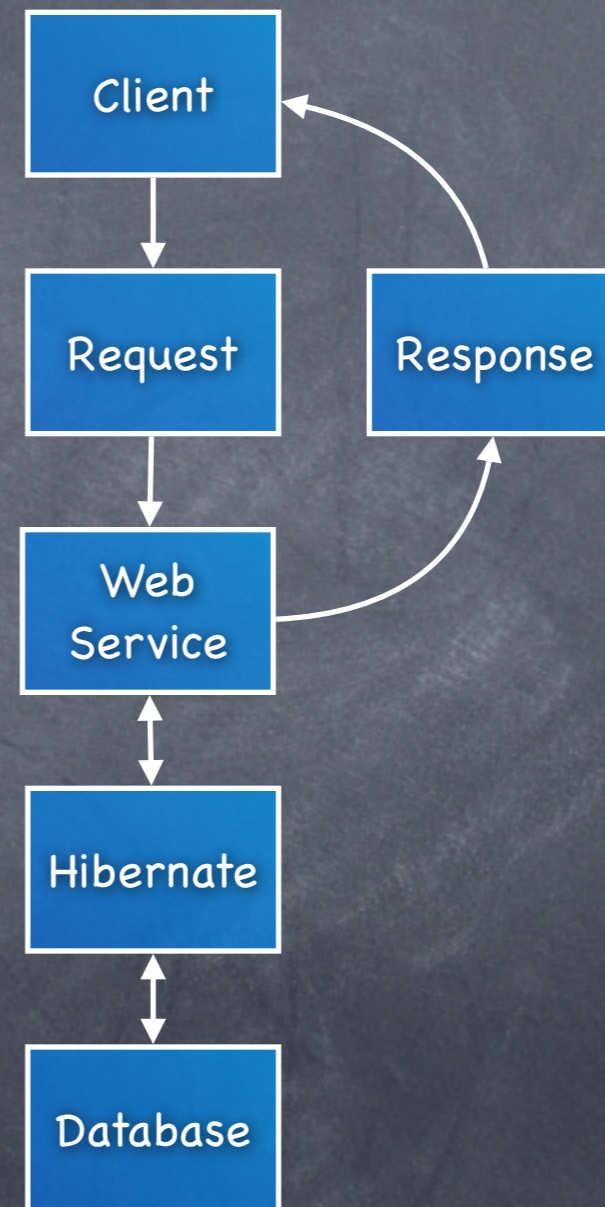


Building a Simulator

1. The `codegen` package is used to generate the portable web service artifacts that simulate the vSphere API.
2. Next, the `db` engine creates the database that powers SimDK.
3. The entire vSphere object graph is transferred to the SimDK database using the `viexport` tool.

Request and Response

1. The client sends a request.
2. The request is processed by the web service.
3. The web service fetches the object(s) from the database using Hibernate.
4. The objects are serialized to XML via their JAXB annotations.



Developer Notes

- The entire project is managed by Maven.
- The entire build cycle is fully automated.
- The entire project is built and managed with open-source tools.

Conclusion

- SimDK allows you to simulate and emulate a virtualized environment from the perspective of the API.
- SimDK is **virtual virtualization**.
- If you have any questions, feel free to e-mail akutz@users.sourceforge.net.