

# What's the difference between a CLI and API, really?



Jeff Browning, 2008-29-04

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Here at Interop, I had an interesting conversation on the show floor about integration. We were talking about how another company can remotely invoke change against infrastructure "via the CLI". When I asked why, the reasoning was that it's just how the infrastructure can be integrated - kind of because, "that's what's available". Sadly - that's pretty true in the networking world. To date, there is no API like [iControl](#) that offers a comprehensive API with broad tool support and functionality.

So - when writing integration via the CLI, what happens when the hardware versions change? Maybe an upgrade patch? Or, what if some smart engineers add some new features that require existing CLI commands to be deprecated?

How does the integration work after that? In many cases - it doesn't. And, that's the difference between a CLI and API. CLIs are hardwired scripts that work well in the short term but don't evolve as gracefully as true integration. Now - they have their place - no question about it. But, for smart, dynamic integration?

APIs provide a more dynamic, fluid integration and binding between software and infrastructure. To do this, the work on the infrastructure side is not trivial. However, it makes a HUGE difference for the end-user trying to write and maintain integration as the underlying infrastructure evolves.

API = nimble and flexible. CLI = brittle and difficult to manage. Big differences.

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