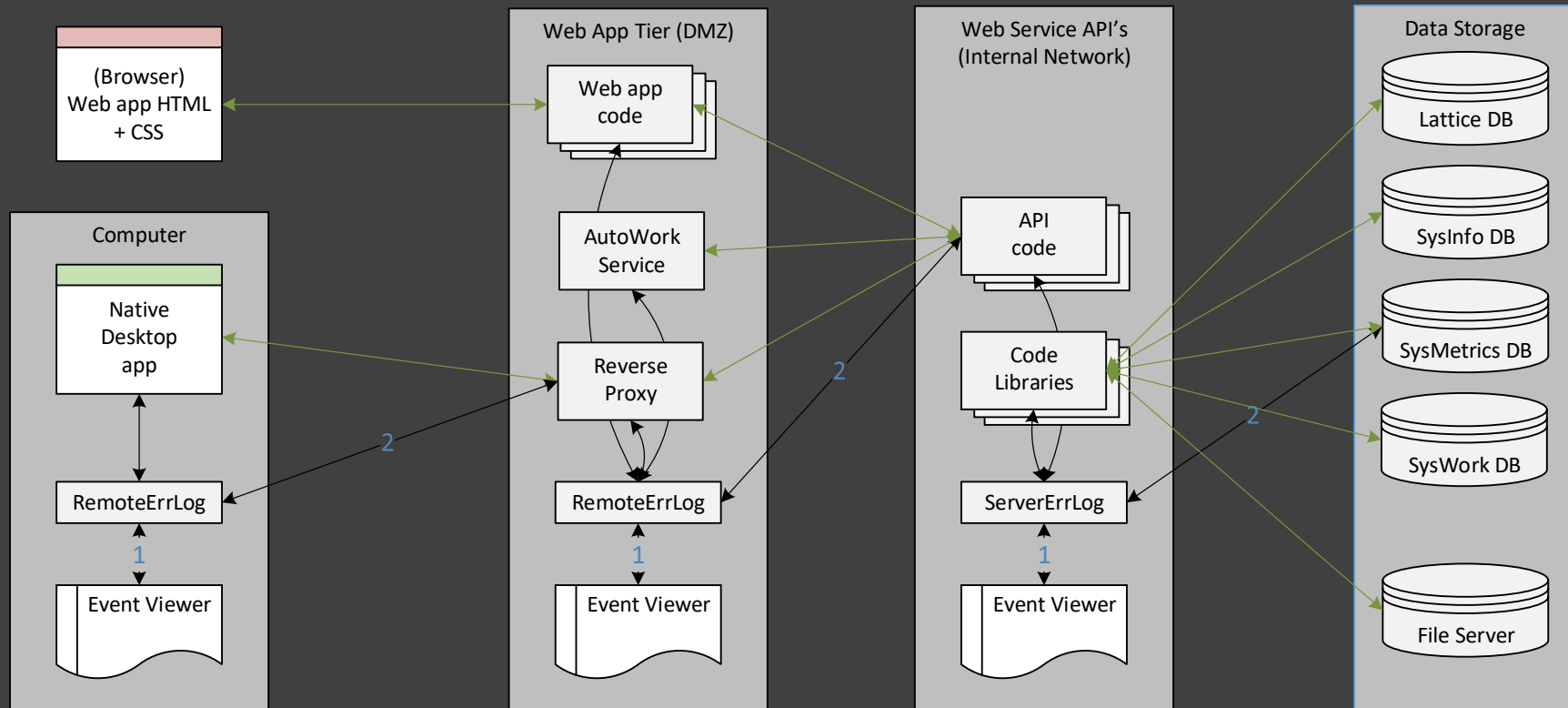


Logging



Reliable, centralized logging is extremely important for distributed systems. DGP has a standardized error handling and logging mechanism for all the tiers of a location. The RemoteErrLog is used by all executables that run outside of the internal network. The class logs all errors and exceptions (1) to its own local Event Viewer, and then (2) calls an API method to log the same data to the DGPErrors table. The ServerErrLog class is used by executables running inside the internal network, and logs all errors and exceptions

(1) to its own local Event Viewer, and then (2) stores the same data to the DGPErrors table using a direct ADO.NET connection. A tool such as Splunk can then be used to monitor the DGPErrors table, and also the Event Viewer on each server in order to notify admins of the problems as they occur.

Logging Verification

1. *A menu item in the Lattice application tests the functionality of the RemoteErrLog class for each user, logging a test message to the local Event Viewer and calling a web service API method to store the same data to the DGPErrors table of the SysMetrics database. The local Event Viewer and the DGPErrors form can then be used to verify that the messages were logged correctly both locally and on the server.*
2. *The API Tester test harness can be used to call a test API method that uses the ServerErrLog class to log a test message to the server Event Viewer and store the same message directly to the DGPErrors table. The DGPErrors form can then be used to remotely verify that the test message was logged correctly.*
3. *Test API methods deliberately throw exceptions to test the web service exception handling logic as well as its error logging.*