

<b>3<sup>rd</sup> Party - Card Payments System</b> <ul style="list-style-type: none"><li>• Provide mocked responses of their system via requesting certain names and addresses for positive and negative responses.</li><li>• The system has an information endpoint which can be contacted for availability</li><li>• It is unknown if there are further test environments available or what the ultimate capacity is for this system.</li><li>• As a 3<sup>rd</sup> party system, comprehensive online documentation regarding each API operation and authentication instructions.</li></ul>	<b>Internal – Credit Search System</b> <ul style="list-style-type: none"><li>• Recently re-architected as a microservice architecture, leading to significant capacity increases.</li><li>• Able to deploy on demand in an automated fashion to multiple environments.</li><li>• A mock service for each micro service was created as part of the new architecture.</li><li>• Extensive API documentation using Swagger is available to all teams at the organisation.</li></ul>
<b>Internal – Money Laundering System</b> <ul style="list-style-type: none"><li>• The system is a tightly coupled, very dense, legacy system with limited automated testing.</li><li>• The system has extensive logging of audit records</li><li>• There are only two environments for this system, a test environment and production, neither of which are the same.</li><li>• A few experienced developers hold most of the knowledge for this system.</li></ul>	<b>IDResolver – CentOS for Web and Database Layers</b> <ul style="list-style-type: none"><li>• CentOS uses yum as a package manager, therefore dependencies can be limited.</li><li>• CentOS has the standard logging tooling of Linux, including syslog and with Apache installed also access logs.</li><li>• As CentOS is built upon the Linux Kernel, it has wide configuration options.</li><li>• Although CentOS is used widely, it does not have the support, security focus and updates of RedHat enterprise.</li></ul>
<b>IDResolver – Perl for Batch Processing</b> <ul style="list-style-type: none"><li>• The batch processing in Perl is not thread safe, so is only run on one webserver, leaving no redundancy.</li><li>• The batch processing system writes log messages to the audit database and sends emails for successfully completed jobs.</li><li>• Jobs are scheduled on a time-based basis, therefore can be separated to assist</li><li>• There are only two Perl Developers remaining and they are transitioning to php, as there is only one system in Perl.</li></ul>	<b>IDResolver – Load Balancing</b> <ul style="list-style-type: none"><li>• The Load Balancer for test environment and production are held on separate instances, production needs high level of access.</li><li>• As the load balancing is a third-party product, it has in built monitoring and alerting, plus an API for configuring alerts in other tools.</li><li>• There is a web interface for observing and changing IP rules and pool configuration that is accessible to development teams for the test environments.</li><li>• Even though it is a third party, online documentation is limited, as the company wishes to train onsite.</li></ul>