



**CA Technologies Transaction Manager-Risk
Analytics Authentication Solution, Risk Assessment,
and Fraud Detection Services**

**Independent Service Auditor's Report on Controls at a
Service Organization Relevant to Security (SOC2, Type 2)**

For the period November 1, 2014 to October 31, 2015



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Independent Service Auditor's Report

CA Technologies
Santa Clara, California

Scope

We have examined the attached description of systems related to CA Technologies' ("CA") Transaction Manager-Risk Analytics Authentication Solution, Risk Assessment, and Fraud Detection Services for the Period November 1, 2014 to October 31, 2015 (the description) and the suitability of the design and operating effectiveness of controls to meet the criteria for the Criteria Common to the Security principle set forth in TSP section 100, Trust Services Principles, Criteria, and Illustrations for Security, Availability, Processing Integrity, Confidentiality, and Privacy (AICPA, Technical Practice Aids) (applicable trust services criteria), throughout the period November 1, 2014 to October 31, 2015. The description indicates that certain applicable trust services criteria specified in the description can be achieved only if complementary user-entity controls contemplated in the design of the service organization's controls are suitably designed and operating effectively, along with related controls at the service organization. We have not evaluated the suitability of the design or operating effectiveness of such complementary user entity controls.

CA uses BT Counterpane, Inc. for managed security monitoring, Qualys, Inc. for vulnerability assessments/application penetration testing, CenturyLink for co-location services & backups and AlertSite for website monitoring. The description indicates that certain applicable trust services criteria can only be met if controls at the subservice organizations are suitably designed and operating effectively. The description presents CA Technologies' Transaction Manager-Risk Analytics Authentication Solution, Risk Assessment, and Fraud Detection Services systems; its controls relevant to the applicable trust services criteria; and the types of controls that the service organization expects to be implemented, suitably designed, and operating effectively at the subservice organizations to meet certain applicable trust services criteria. The description does not include any of the controls implemented at the subservice organizations. Our examination did not extend to the services provided by the subservice organizations.

Service Organization's Responsibilities

The service organization has provided their attached assertion, beginning on page 4, related to the Transaction Manager-Risk Analytics Authentication Solution, Risk Assessment, and Fraud Detection Services for the Period of November 1, 2014 to October 31, 2015 which is based on the criteria identified in management's assertion. The service organization is responsible for (1) preparing the description and the assertion; (2) the completeness, accuracy, and method of presentation of both the description and assertion; (3) providing the services covered by the description; (4) specifying the controls that meet the applicable trust services criteria and stating them in the description; and (5) designing, implementing, and documenting the controls to meet the applicable trust services criteria.

Service Auditor's Responsibilities

Our responsibility is to express an opinion on the fairness of the presentation of the description based on the description criteria set forth in the service organization's assertion and on the suitability of the design and operating effectiveness of the controls to meet the applicable trust services criteria, based on our examination. We conducted our examination in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA). Those standards require that we plan and perform our examination to obtain reasonable assurance about whether, in all material respects, (1) the description is fairly presented based on the description criteria, and (2) the controls were suitably designed and operating effectively to meet the applicable trust services criteria throughout the period November 1, 2014 to October 31, 2015.

Our examination involved performing procedures to obtain evidence about the fairness of the presentation of the description based on the description criteria and the suitability of the design and operating effectiveness of those controls to meet the applicable trust services criteria. Our procedures included assessing the risks that the description is not fairly presented and that the controls were not suitably designed or operating effectively to meet the applicable trust services criteria. Our procedures also included testing the operating effectiveness of those controls that we consider necessary to provide reasonable assurance that the applicable trust services criteria were met. Our examination also included evaluating the overall presentation of the description. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Inherent Limitations

Because of their nature and inherent limitations, controls at a service organization may not always operate effectively to meet the applicable trust services criteria. Also, the projection to the future of any evaluation of the fairness of the presentation of the description or conclusions about the suitability of the design or operating effectiveness of the controls to meet the applicable trust services criteria is subject to the risks that the system may change or that controls at a service organization may become inadequate or fail.

Opinion

In our opinion, in all material respects, based on the description criteria identified in CA's assertion and the applicable trust services criteria:

- the description fairly presents CA's Transaction Manager-Risk Analytics Authentication Solution, Risk Assessment, and Fraud Detection Services that were designed and implemented throughout the period November 1, 2014 to October 31, 2015.
- the controls stated in the description were suitably designed to provide reasonable assurance that the applicable trust services criteria would be met if the controls operated effectively throughout the period November 1, 2014 to October 31, 2015, and user entities applied the complimentary user-entity controls contemplated in the design of CA's Transaction Manager-Risk Analytics Authentication Solution, Risk Assessment, and Fraud Detection Services throughout the period November 1, 2014 to October 31, 2015, and the subservice organizations applied, throughout the period November 1, 2014 to October 31, 2015, the types of controls expected to be implemented at the subservice organizations and incorporated in the design of the system.
- the controls tested relative to CA's Transaction Manager-Risk Analytics Authentication Solution, Risk Assessment, and Fraud Detection Services, which together with the types of controls expected to be implemented at the subservice organizations and incorporated in the design of the system, if operating effectively, and together with the complementary user entity controls referred to in the scope paragraph of this report, if operating effectively, were those necessary to provide reasonable assurance that the criteria stated in the description were met, operated effectively throughout the period November 1, 2014 to October 31, 2015.

Description of Tests of Controls

The specific controls we tested and the nature, timing, and results of those tests are listed in Section III and of this report.

Other Matters

Management's responses to the exception identified in Section III have not been subjected to our examination procedures, and accordingly, we express no opinion on them.

The information in the Section IV entitled "Other Information Provided by CA Technologies" is presented by CA to provide additional information related to Business Continuity Planning and GLBA Compliance to the user organization and is not a part of CA's description of systems that may be relevant to a user organization's internal controls. Such information has not been subjected to the procedures applied in the examination of the description of the controls applicable to the processing of transactions for user organizations and, accordingly, we express no opinion on it.

Intended Use

This report and the description of tests of controls and the results thereof are intended solely for the information and use of CA; user entities of the CA Transaction Manager-Risk Analytics Authentication Solution, Risk Assessment, and Fraud Detection Services; and prospective user entities, independent auditors and practitioners providing services to such user entities, and regulators who have sufficient knowledge and understanding of the following:

- The nature of the service provided by the service organization.
- How the service organization's system interacts with user entities, subservice organizations, and other parties.
- Internal control and its limitations.
- Complementary user-entity controls and how they interact with related controls at the service organization to meet the applicable trust services criteria.
- The applicable trust services criteria.
- The risks that may threaten the achievement of the applicable trust services criteria and how controls address those risks.

This report is not intended to be and should not be used by anyone other than these specified parties.


Crowe Horwath LLP

South Bend, Indiana
December 18, 2015

