

# **National Automated Clearing House Association Rules**

*eChecks*



*July 2016*

**The University of Texas at Austin  
Office of Internal Audits  
UTA 2.302  
(512) 471-7117**

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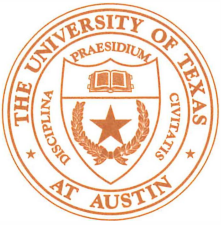
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This report has been distributed to Internal Audit Committee members, the Legislative Budget Board, the State Auditor's Office, the Sunset Advisory Commission, the Governor's Office of Budget and Planning, and The University of Texas System Audit Office for distribution to the Audit, Compliance, and Management Review Committee of the Board of Regents.

**National Automated Clearing House Association (NACHA) Rules – eChecks  
Project Number: 16.301**



**OFFICE OF INTERNAL AUDITS**  
THE UNIVERSITY OF TEXAS AT AUSTIN

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July 18, 2016

President Gregory L. Fenves  
The University of Texas at Austin  
Office of the President  
P.O. Box T  
Austin, Texas 78713

Dear President Fenves,

We have completed our audit of National Automated Clearing House Association (NACHA) rules. Our scope included the current controls associated with the Office of Accounting's eCheck payment option.

Based on interviews with relevant staff, a review of policies and procedures, a review of applicable IT system documentation, and limited testing, we conclude that the Office of Accounting's eCheck payment option is generally in compliance with *NACHA 2015 Operating Rules for Internet-Initiated/Mobile Entries*. Our audit provides detailed observations regarding two-factor authentication for remote access to eCheck data. A suggestion is offered for improvement in the existing control structure.

We appreciate the cooperation and assistance of the Office of Accounting throughout the audit and hope that the information presented herein is beneficial.

Sincerely,

A handwritten signature in purple ink, appearing to read "Michael W. Vandervort".

Michael W. Vandervort, CPA  
Chief Audit Executive

cc: Institutional Audit Committee Members  
Mr. Darrell Bazzell, Senior Vice President and Chief Financial Officer  
Ms. Mary Knight, Associate Vice President for Finance, Office of Accounting  
Ms. Patricia Ohlendorf, Vice President for Legal Affairs  
Mr. Jeff Treichel, Associate Director, Office of Internal Audits



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## EXECUTIVE SUMMARY

### **Conclusion**

Based on the procedures performed, Internal Audits concludes that Accounting's eCheck payment option is generally in compliance with *NACHA 2015 Operating Rules for Internet-Initiated/Mobile Entries (WEB)*; however, one recommendation was made regarding access controls.

### **Summary of Recommendations**

Internal Audits identified one notable issue which led to the following recommendation:

- Management should ensure that off-campus access to confidential data on the mainframe requires two-factor authentication. (Audit Issue Ranking: High)

The issue has been ranked according to The University of Texas System Administration (UT System) Audit Issue Ranking guidelines. Please see the Appendix for ranking definitions.

Management agrees with our observation and has provided a corrective action plan which is expected to be implemented on or before August 9, 2016.

### **Audit Scope and Objective**

The scope of this audit included current controls in place for the Office of Accounting's eCheck payment option. The specific audit objective was to determine compliance with *NACHA 2015 Operating Rules for Internet Initiated/Mobile Entries (WEB)*.

### **Background Summary**

The Office of Accounting provides individuals, typically students, the option of making payments to The University of Texas at Austin (UT Austin) through its website using an eCheck. Payments may include tuition, room and board, taxes, fees, and Bevo Bucks. Monetary transfers to UT Austin via eCheck rather than by debit or credit card are processed through the Automated Clearing House (ACH) Network. NACHA is a not-for-profit trade association that oversees the ACH system.<sup>1</sup>

For ACH transactions, the individual initiating the eCheck payment is called the Receiver and UT Austin, which creates the ACH entry that is sent to a depository institution, is the Originator. NACHA Operating Rules require each Originator of Internet-Initiated/Mobile Entries<sup>2</sup> to conduct an annual audit to ensure that the financial information the Originator obtains from each Receiver is protected by commercially reasonable security practices.

This audit was conducted as part of the Fiscal Year 2016 Audit Plan.

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<sup>1</sup> NACHA Website - <https://www.nacha.org/>

<sup>2</sup> Internet-Initiated/Mobile Entries are defined by NACHA as debit entries to a consumer's account based on an authorization from the Receiver to the Originator via the Internet or Wireless Network, excluding oral authorization via these channels.



## BACKGROUND

The Office of Accounting (Accounting) provides individuals, typically students, the option of making payments to The University of Texas at Austin (UT Austin) through its website using an electronic check (eCheck). Payments may include tuition, room and board, taxes, fees, and Bevo Bucks<sup>3</sup>. Monetary transfers to UT Austin via eCheck rather than by debit or credit card are processed through the Automated Clearing House (ACH) Network. The National Automated Clearing House Association (NACHA) is a not-for-profit trade association that oversees the ACH system.<sup>4</sup>

For single ACH transactions, the individual initiating the eCheck payment is called the Receiver. UT Austin, which creates and sends the ACH entry to a depository financial institution, is the Originator.

According to *Chapter 48 of the NACHA Operating Rules, Internet-Initiated/Mobile Entries*<sup>5</sup>, Originators are required to conduct an annual data security audit to ensure that the financial information the Originator obtains from Receivers is protected by commercially reasonable security practices that include adequate levels of:

- Physical security to protect against theft, tampering or damage;
- Administrative, technical, and physical access controls to protect against unauthorized access and use; and
- Network security to ensure secure capture, transmission, storage, distribution, and destruction of financial information.

For the fiscal year ending August 31, 2015, Accounting’s webpages (“What I Owe”, “My Tuition Bill”, and “Institution Loans”) processed 162,155 eCheck transactions totaling approximately \$190 million. Compared to the prior year, the number of eCheck transactions increased 6% while the total dollar amount processed increased by nearly \$11 million or 6%.

At the time of this audit, UT Austin did not have a mobile device software application covered under NACHA rules and regulations.

## SCOPE, OBJECTIVES, AND PROCEDURES

The scope of this audit included current controls in place for the Office of Accounting’s eCheck payment option. The specific audit objective was to determine compliance with *NACHA 2015 Operating Rules for Internet Initiated/Mobile Entries (WEB)*.

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<sup>3</sup> Bevo Bucks is a “cashless form of payment accessible through the student ID card” and can be used like a prepaid debit card on and off campus. Bevo Bucks Website: <http://bevobucks.utexas.edu/?site=5>

<sup>4</sup> NACHA Website - <https://www.nacha.org/>

<sup>5</sup> Internet-Initiated/Mobile Entries are defined by NACHA as debit entries to a consumer’s account based on an authorization from the Receiver to the Originator via the Internet or Wireless Network, excluding oral authorization via these channels.



To achieve this objective, the Office of Internal Audits (Internal Audits):

- Reviewed *NACHA 2015 Operating Rules for Internet-Initiated/Mobile Entries*;
- Reviewed current UT Austin policies, procedures, and guidelines;
- Reviewed the current list of users with access to \*DEFINE<sup>6</sup> related eCheck information;
- Interviewed staff from Information Technology Services (ITS) and the Office of Accounting;
- Reviewed supporting documentation; and
- Performed testing on information systems.

This audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* and with *Government Auditing Standards*.

## AUDIT RESULTS

NACHA requires that at a minimum, the audit cover the following sections of the NACHA Operating Rules:

- Physical security,
- Personnel and Access controls, and
- Network security.

The following recommendation was made regarding access controls. The issue has been ranked according to The University of Texas System Administration (UT System) Audit Issue Ranking guidelines. Please see the Appendix for ranking definitions.

### **Access Controls – Two-factor authentication for remote access**

#### **Audit Issue Ranking: High**

Confidential UT Austin data housed on the mainframe is currently accessible off-campus without the use of two-factor authentication. Access has historically been limited through network filtering and been granted to the user through a \*DPUSER ID<sup>7</sup>. Two-factor authentication for the entire mainframe has not been implemented. Without two-factor authentication on the mainframe, there is a higher risk of unauthorized logins which could result in financial loss, privacy breaches, loss of reputation, and unauthorized disclosure of information.

According to the *Information Resources Use and Security Policy*, Section 4.6.1<sup>8</sup>, as of March 18, 2015, “Two-factor Authentication is required when an employee or other individual providing services on behalf of the University (such as a student employee,

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<sup>6</sup> \*DEFINE is “The University of Texas Departmental Financial Information Network, accessed through the university mainframe computer.” [https://austin-utexas.custhelp.com/app/answers/detail/a\\_id/686/kw/\\*define/session/L3RpbWUyMTQ2NTMxMjM0OS9zaWQvZ0twb0JzU20%3D](https://austin-utexas.custhelp.com/app/answers/detail/a_id/686/kw/*define/session/L3RpbWUyMTQ2NTMxMjM0OS9zaWQvZ0twb0JzU20%3D)

<sup>7</sup> \*DPUSER is a university mainframe application that authorizes logon IDs: [https://austin-utexas.custhelp.com/app/answers/detail/a\\_id/611/kw/\\*dpuser%20id](https://austin-utexas.custhelp.com/app/answers/detail/a_id/611/kw/*dpuser%20id)

<sup>8</sup> Information Resources Use and Policy: <https://security.utexas.edu/policies/irusp#standard4>



contractor, or volunteer) logs on to a University network using an enterprise Remote Access gateway such as VPN, Terminal Server, Connect, Citrix, or similar services”

**Recommendation:** Management should ensure that off-campus access to confidential data on the mainframe requires two-factor authentication.

**Management’s Response and Corrective Action Plan:**

UT Austin’s two-factor-authenticated VPN will be required when accessing the mainframe via 3270 from off-campus beginning August 9, 2016.

Responsible Person: Assistant Director, Financial Information Systems

Planned Implementation Date: August 9, 2016

**Post Audit Review:** Internal Audits will perform follow-up work in the fourth quarter of fiscal year 2016.

## CONCLUSION

Based on the procedures performed, Internal Audits concludes that Accounting’s eCheck payment option is generally in compliance with *NACHA 2015 Operating Rules for Internet-Initiated/Mobile Entries (WEB)*; however, one recommendation was made regarding access controls.

In accordance with directives from The University of Texas System Board of Regents, the Office of Internal Audits will perform follow-up procedures to confirm that audit recommendations have been implemented.





## APPENDIX

### Audit Issue Ranking

Audit issues are ranked according to the following definitions, consistent with UT System Audit Office guidance. These determinations are based on overall risk to UT System, UT Austin, and/or the individual college/school/unit if the issues are left uncorrected. These audit issues and rankings are reported to UT System directly.

- **Priority** – A Priority Issue is an issue that, if not addressed immediately, has a high probability to directly impact achievement of a strategic or important operational objective of UT Austin or the UT System as a whole.
- **High** – An issue that is considered to have a medium to high probability of adverse effects to UT Austin either as a whole or to a significant college/school/unit level.
- **Medium** – An issue that is considered to have a low to medium probability of adverse effects to UT Austin either as a whole or to a college/school/unit level.
- **Low** – An issue that is considered to have minimal probability of adverse effects to UT Austin either as a whole or to a college/school/unit level. Issues with a ranking of “Low” are reported verbally to the unit and are not included in the final report.