VERACODE

Veracode Detailed Report

Application Security Report
As of 11 Dec 2023

Prepared for:	Interswitch
Prepared on:	11 December
Application:	paydirect-e...

Industry:	Not Specified
Business Criticality:	BC5 (Very High)
Required Analysis:	Any
Type(s) of Analysis Conducted:	Static
Scope of Static Scan:	1 of 1 Modules Analyzed

Inside This Report

VERACODE

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Application Security Report
As of 11 Dec 2023

Veracode Level: VL3 + SCA

Rated: 11-Dec-2023

Application:	paydirect-enterprise	Business Criticality:	Very High
Target Level:	None	Published Rating:	C

Scans Included in Report

Static Scan	Dynamic Scan	Manual Penetration Test
11 Dec 2023 Static (2) Score: 77 Completed: 11/12/23	Not Included in Report	Not Included in Report

Executive Summary

This report contains a summary of the security flaws identified in the application using manual penetration testing, automated static and/or automated dynamic security analysis techniques. This is useful for understanding the overall security quality of an individual application or for comparisons between applications.

Application Business Criticality: BC5 (Very High)

Impacts:Operational Risk (High), Financial Loss (High)

An application's business criticality is determined by business risk factors such as: reputation damage, financial loss, operational risk, sensitive information disclosure, personal safety, and legal violations. The Veracode Level and required assessment techniques are selected based on the policy assigned to the application.

Analyses Performed vs. Required

Number of Flaws Found by Severity
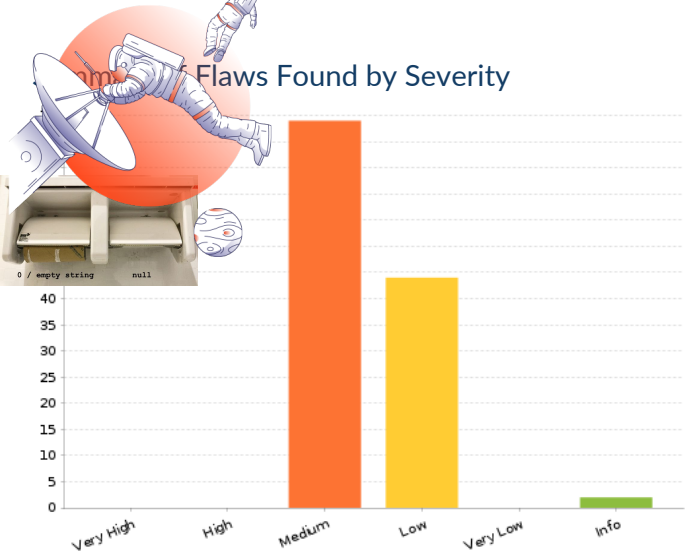
Action Items:

Veracode recommends the following approaches ranging from the most basic to the strong security measures that a vendor can undertake to increase the overall security level of the application.

Flaws To Fix For Minimum Score

→ A rule in your policy requires a minimum score of 90. Fix 56 Medium flaws to reach a score of 90.

→ Your Static Scan was due on 11/12/23 for follow-up analysis to satisfy the grace period on your minimum score rule and your application is no longer compliant with your policy. Submit application for follow-up Static Scan once flaws have been remediated in order to regain compliance with your policy.

Longer Timeframe (6 - 12 months)

→ Certify that software engineers have been trained on application security principles and practices.
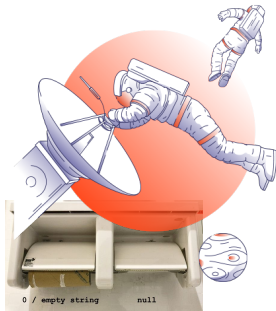
Application Trend Data
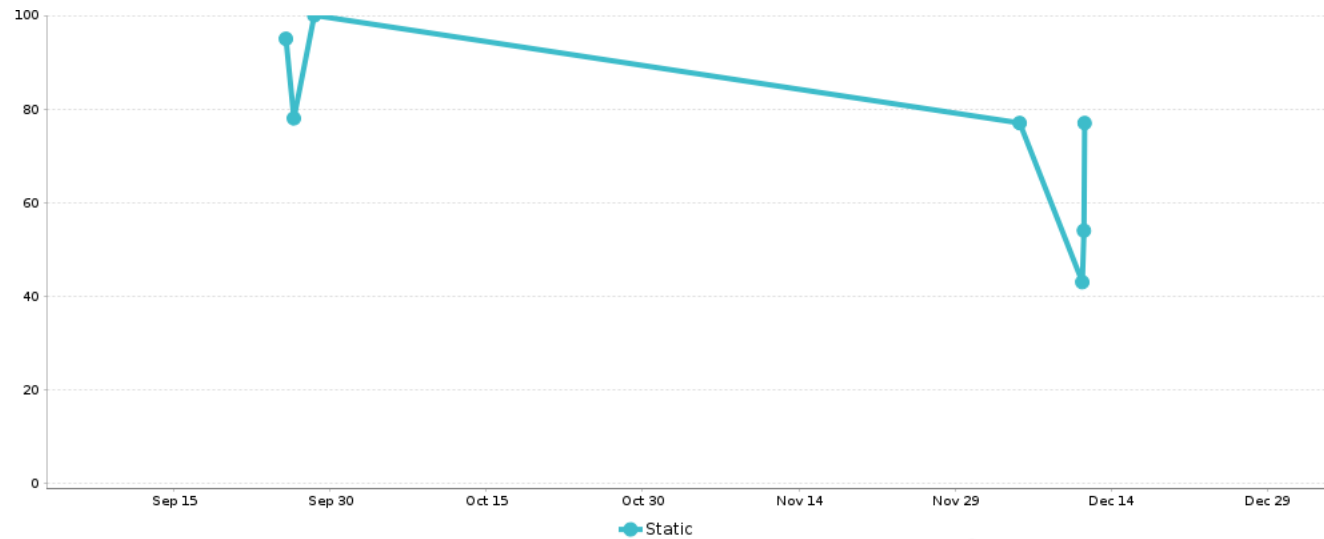
Scope of Static Scan

The following modules were included in the static scan because the scan submitter selected [...] as entry points, which are modules that accept external data.

Engine Version: 20231129165901

The following modules were included in the application scan:

Module Name	Compiler	Operating Environment	Engine Version
paydirect_ent 1.dll	MSIL_MSVC14_X86	Windows	202311291 65901

File Differences Between Scans

The uploaded modules for this scan do not match the modules you uploaded for the previous scan. This disparity can affect the scan results even if Veracode did not find flaws in the files with differences. See appendix for more details.

Flaw Types by Severity and Category

Static Scan Security Quality Score = 77 (+23) from prior scan			
Very High	**0**	**(-1)**	
Code Injection		(-1)	
High	**0**		
Medium	**74**	**(-732)**	
Authentication Issues		(-42)	
CRLF Injection		(-21)	
Credentials Management		(-10)	
Cross-Site Scripting (XSS)	27	(-568)	
Cryptographic Issues	1	(-57)	

Static Scan Security Quality Score = 77 (+23) from prior scan			
Information Leakage	1	(-2)	
Insufficient Input Validation	45	(-32)	
Low	**44**	**(-274)**	
Information Leakage	32	(-60)	
Insufficient Input Validation	12	(-214)	
Very Low	**0**		
Informational	**2**	**(-11)**	
Code Quality	2	(-11)	
Total	**120**	**(-1,018)**	
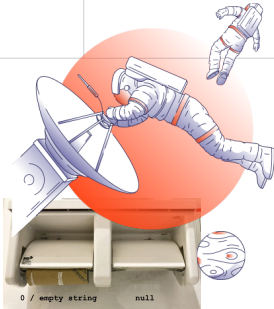
Policy Evaluation

Policy Name: ISW_Veracode Policy

Revision: 11

Policy Status: Did Not Pass

Description: ISW Application Security policy
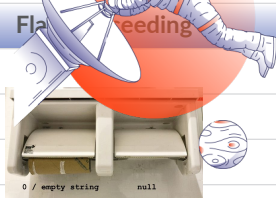
Rules

Rule type	Requirement	Findings	Status
Max Severity	High	Flaws found: 0	Passed
Min Analysis Score	90	77	Did not pass

Scan Requirements

Scan Type	Frequency	Last performed	Status
Any	Once	11/12/23	Passed

Remediation

Flaw Severity	Grace Period	Flaws Exceeding	Status
Very High	0 days		Passed
High	0 days		Passed
Medium	0 days		Passed
Low	0 days	0	Passed
Very Low	0 days	0	Passed
Informational	0 days	0	Passed

Type	Grace Period	Exceeding	Status
Min Analysis Score	0 days	1	Did not pass

Unsupported Frameworks

This report may have incomplete results based on the following unsupported frameworks identified during the static scan:

* Subsonic
* Crystal Reports

The lack of support for all frameworks in use by this application and/or its supporting libraries may prevent the static discovery of some flaws in the application, however, it does not invalidate the flaws that were found.

Findings & Recommendations

Detailed Flaws by Severity

Very High (0 flaws)

No flaws of this type were found

High (0 flaws)

No flaws of this type were found

Medium (74 flaws)

➡ **Cross-Site Scripting (XSS)(27 flaws)**

Description

Cross-site scripting (XSS) attacks occur when an attacker uses a web application to send malicious code, generally in the form of a browser side script, to a different end user. Flaws that allow these attacks to succeed occur whenever a web application uses untrusted data in the output it generates without validating or encoding it. XSS vulnerabilities are commonly exploited to steal or manipulate cookies, modify presentation of content, and compromise sensitive information, with new attack vectors being discovered on a regular basis. XSS is also commonly referred to as HTML injection.

XSS vulnerabilities can be either persistent or transient (often referred to as stored and reflected, respectively). In a persistent XSS vulnerability, the injected code is stored by the application, e.g., within a blog comment or message board. The attack occurs whenever a victim views the page containing the code. In a transient XSS vulnerability, the injected code is included directly in the HTTP request. These attacks are carried out via malicious URLs sent via email or another website and requires the victim to browse to that link. The consequence of an XSS attack to a victim is the same regardless of whether it is persistent or transient; however, persistent XSS vulnerabilities are likely to affect a greater number of victims due to its delivery mechanism.

Recommendations

Several techniques can be used to prevent XSS attacks. These techniques complement each other and address security at different points in the application. Using multiple techniques provides defense-in-depth and minimizes the likelihood of a XSS vulnerability.

* Use output filtering to sanitize all output generated from user-supplied input, selecting the appropriate method of encoding based on the use case of the untrusted data. For example, if the data is being written to the body of an HTML page, use HTML entity encoding. However, if the data is being used to construct generated Javascript or if it is consumed by client-side methods that may interpret it as code (a common technique in Web 2.0 applications), additional restrictions may be necessary beyond simple HTML encoding.
* Validate user-supplied input using positive filters (white lists) to ensure that it conforms to the expected format, using centralized data validation routines when possible.
* Do not permit users to include HTML content in posts, notes, or other data that will be displayed by the application. If users are permitted to include HTML tags, then carefully limit access to specific elements or attributes, and use strict validation filters to prevent abuse.

Associated Flaws by CWE ID:

Improper Neutralization of Script-Related HTML Tags in a Web Page (Basic XSS) (CWE ID 80)(27 flaws)
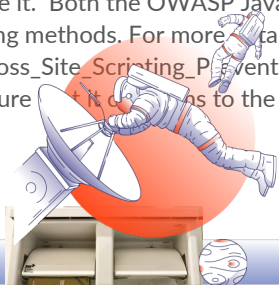
Description

This call contains a cross-site scripting (XSS) flaw. The application populates the HTTP response with untrusted input, allowing an attacker to embed malicious content, such as Javascript code, which will be executed in the context of the victim's browser. XSS vulnerabilities are commonly exploited to steal or manipulate cookies, modify presentation of content, and compromise confidential information, with new attack vectors being discovered on a regular basis.

Effort to Fix: 3 - Complex implementation error. Fix is approx. 51-500 lines of code. Up to 5 days to fix.

Recommendations

Use contextual escaping on all untrusted data before using it to construct any portion of an HTTP response. The escaping method should be chosen based on the specific use case of the untrusted data, otherwise it may not protect fully against the attack. For example, if the data is being written to the body of an HTML page, use HTML entity escaping; if the data is being written to an attribute, use attribute escaping; etc. When a web framework provides built-in support for automatic XSS escaping, do not disable it. Both the OWASP Java Encoder library for Java and the Microsoft AntiXSS library provide contextual escaping methods. For more details on contextual escaping, see https://cheatsheetseries.owasp.org/cheatsheets/Cross_Site_Scripting_Prevention_Cheat_Sheet.html. In addition, as a best practice, always validate untrusted input to ensure that it conforms to the expected format, using centralized data validation routines when possible.

Instances found via Static Scan

	Flaw Id	Module #	Class #	Module	Fix By
NEW	1613	-	33	paydirect_ent 1	CodeDownload_Click(object, System.EventArgs) 64%
NEW	1605	-	44	paydirect_ent 1.dll	void DoPayment(bool) 95%
NEW	1599	-	40	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 9%
NEW	1608	-	46	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 14%
NEW	1609	-	46	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 15%
NEW	1593	-	52	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 29%
NEW	1595	-	50	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 57%
NEW	1596	-	51	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 57%
NEW	1600	-	40	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 60%
NEW	1615	-	34	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 61%
NEW	1665	-	21	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 62%
NEW	1594	-	47	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 75%
NEW	1590	-	78	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 76%

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1592	-	49	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 78%	
NEW	1591	-	48	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 79%	
NEW	1569	-	54	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 84%	
NEW	1571	-	55	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 86%	
NEW	1610	-	46	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 87%	
NEW	1611	-	46	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 87%	
NEW	1601	-	40	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 91%	
NEW	1602	-	40	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 93%	
NEW	1666	-	21	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 97%	
NEW	1606	-	44	paydirect_ent 1.dll	...wOrHide...ThirdPartyInformation(Enter...Products.Paydirect.BusinessLogic.Bu...Facade.EnterpriseProduct, ...re.valueobject.PayLog) 93%	
NEW	1607	-	44	paydirect_ent 1.dll	...entDetails(EnterpriseProducts. Paydirect.BusinessLogic.BusinessFacade. EnterpriseProductPayLog, EnterpriseProducts.Paydirect.BusinessLo gic.BusinessFacade.EnterpriseProduct) 98%	
NEW	1664	-	16	paydirect_ent 1.dll	void ShowSuccessMessage(string) 26%	
	160	-	44	paydirect_ent 1.dll	void UpdateUI_ForV1_TreasurySingleAccount _Success() 55%	
	161	-	44	paydirect_ent 1.dll	void UpdateUI_ForV1_TreasurySingleAccount _Success() 95%	
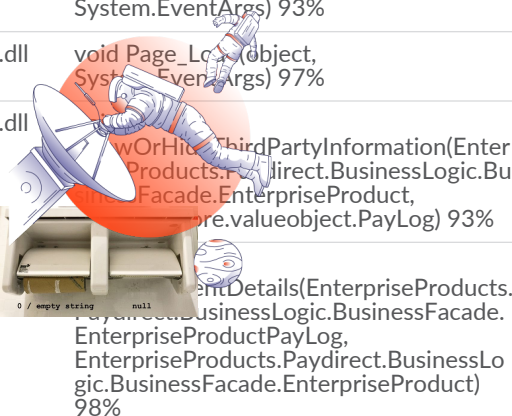
→ Cryptographic Issues(1 flaw)

Description

Applications commonly use cryptography to implement authentication mechanisms and to ensure the confidentiality and integrity of sensitive data, both in transit and at rest. The proper and accurate implementation of cryptography is extremely critical to its efficacy. Configuration or coding mistakes as well as incorrect assumptions may negate a large degree of the protection it affords, leaving the crypto implementation vulnerable to attack.

Common cryptographic mistakes include, but are not limited to, selecting weak keys or weak cipher modes, unintentionally exposing sensitive cryptographic data, using predictable entropy sources, and mismanaging or hard-coding keys.

Developers often make the dangerous assumption that they can improve security by designing their own cryptographic algorithm; however, one of the basic tenets of cryptography is that any cipher whose effectiveness is reliant on the secrecy of the algorithm is fundamentally flawed.

Recommendations

Select the appropriate type of cryptography for the intended purpose. Avoid proprietary encryption algorithms as they typically rely on "security through obscurity" rather than sound mathematics. Select key sizes appropriate for the data being protected; for high assurance applications, 256-bit symmetric keys and 2048-bit asymmetric keys are sufficient. Follow best practices for key storage, and ensure that plaintext data and key material are not inadvertently exposed.

Associated Flaws by CWE ID:

➡️   Insufficient Entropy (CWE ID 331)(1 flaw)

Description

Standard random number generators do not provide a sufficient amount of entropy when used for security purposes. Attackers can brute force the output of pseudorandom number generators such as rand().

Effort to Fix: 2 - Implementation error. Fix is approx. 6-50 lines of code. 1 day to fix.

Recommendations

If this random number is used where security is a concern, such as generating a session identifier or cryptographic key, use a trusted cryptographic random number generator.
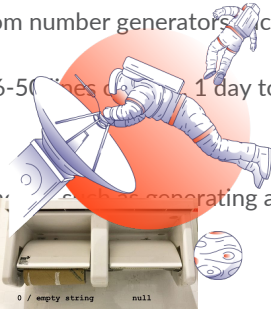
Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
106	-	17	paydirect_ent 1.dll	string generateRandomPin() 96%	

➡️   Information Leakage(1 flaw)

Description

An information leak is the intentional or unintentional disclosure of information that is either regarded as sensitive within the product's own functionality or provides information about the product or its environment that could be useful in an attack. Information leakage issues are commonly overlooked because they cannot be used to directly exploit the application. However, information leaks should be viewed as building blocks that an attacker uses to carry out other, more complicated attacks.

There are many different types of problems that involve information leaks, with severities that can range widely depending on the type of information leaked and the context of the information with respect to the application. Common sources of information leakage include, but are not limited to:

* Source code disclosure
* Browsable directories
* Log files or backup files in web-accessible directories
* Unfiltered backend error messages
* Exception stack traces
* Server version information
* Transmission of uninitialized memory containing sensitive data

Recommendations

Configure applications and servers to return generic error messages and to suppress stack traces from being displayed to end users. Ensure that errors generated by the application do not provide insight into specific backend issues.

Remove all backup files, binary archives, alternate versions of files, and test files from web-accessible directories of production servers. The only files that should be present in the application's web document root are files required by the application. Ensure that deployment procedures include the removal of these file types by an administrator. Keep web and application servers fully patched to minimize exposure to publicly-disclosed information leakage vulnerabilities.

Associated Flaws by CWE ID:

➡ ### Server-Side Request Forgery (SSRF) (CWE ID 918)(1)

Description

The web server receives a URL or similar request from an upstream component and retrieves the contents of this URL, but it does not sufficiently ensure that the request is being sent to the expected destination.
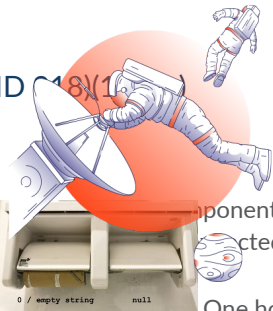
Effort to Fix: 1 - Trivial implementation error. Fix is up to 5 lines of code. One hour or less to fix.

Instances found via Static Scan

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1675	-	80	paydirect_ent 1.dll	void MoveNext() 40%	

➡ ### Insufficient Input Validation(45 flaws)

Description

Weaknesses in this category are related to an absent or incorrect protection mechanism that fails to properly validate input that can affect the control flow or data flow of a program.

Recommendations

Validate input from untrusted sources before it is used. The untrusted data sources may include HTTP requests, file systems, databases, and any external systems that provide data to the application. In the case of HTTP requests, validate all parts of the request, including headers, form fields, cookies, and URL components that are used to transfer information from the browser to the server side application.

Duplicate any client-side checks on the server side. This should be simple to implement in terms of time and difficulty, and will greatly reduce the likelihood of insecure parameter values being used in the application.

Associated Flaws by CWE ID:

→ ### Improperly Controlled Modification of Dynamically-Determined Object Attributes (CWE ID 915)(1 flaw)

Description

The software receives input from an upstream component that specifies multiple attributes, properties, or fields that are to be initialized or updated in an object, but it does not properly control which attributes can be modified. By manipulating the contents of an HTTP request, the attacker may be able to set attributes beyond those intended by the developer.

Effort to Fix: 2 - Implementation error. Fix is approx. 6-50 lines of code. 1 day to fix.

Recommendations

In .NET, explicitly specify which of the Model's attributes should be accessible using the Bind attribute by setting the Include property to each allowable property. If it is not feasible to use the preferred property Include, instead specify which attributes should not be accessible using the Bind attribute and setting the Exclude property to each prohibited property.

In Ruby on Rails, explicitly specify which of each model's attributes should be accessible using the attr_accessible method. If for some reason it is not feasible to use the preferred way, specify which attributes should not be accessible in this way using the attr_protected method.

Instances found via Static Scan

	Flaw Id	Module #	Class #	Module		Fix By
NEW	1612	-	18	paydirect_ent 1.dll	System.Web.Mvc.ActionResult Index(Model.ProductDocumentTemplate, long) 0%	

→ ### URL Redirection to Untrusted Site ('Open Redirect') (CWE ID 601)(44 flaws)

Description

A web application accepts a untrusted input that specifies a link to an external site, and uses that link to generate a redirect. This enables phishing attacks.

Effort to Fix: 2 - Implementation error. Fix is approx. 6-50 lines of code. 1 day to fix.

Recommendations

Always validate untrusted input to ensure that it conforms to the expected format, using centralized data validation routines when possible. Check the supplied URL against a whitelist of approved URLs or domains before redirecting.

Instances found via Static Scan

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1619	-	81	paydirect_ent 1.dll	void btnBack_Click(object, System.EventArgs) 19%	
NEW	1623	-	28	paydirect_ent 1.dll	void btnCancel_Click(object,	

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW					System.EventArgs) 95%	
NEW	1617	-	81	paydirect_ent 1.dll	void btnContinue_Click(object, System.EventArgs) 38%	
NEW	1618	-	81	paydirect_ent 1.dll	void btnContinue_Click(object, System.EventArgs) 65%	
NEW	1564	-	68	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 84%	
NEW	1677	-	60	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 84%	
NEW	1616	-	34	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 86%	
NEW	1580	-	65	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 87%	
NEW	1563	-	62	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1565	-	71	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1566	-	74	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1567	-	75	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1568	-	53	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1570	-	54	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1572	-	55	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1574	-	79	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1576	-	61	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1577	-	70	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1578	-	57	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1579	-	64	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1581	-	66	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1582	-	67	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1583	-	69	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1584	-	72	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1585	-	73	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1620	-	24	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1621	-	25	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1676	-	58	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1678	-	63	paydirect_ent 1.dll	void btnReportsMenu_Click(object, System.EventArgs) 91%	
NEW	1587	-	76	paydirect_ent 1.dll	void btnSubmit_Click(object, System.EventArgs) 93%	
NEW	1589	-	77	paydirect_ent 1.dll	void btnSubmit_Click(object, System.EventArgs) 95%	
NEW	1622	-	28	paydirect_ent 1.dll	void btnSubmit_Click(object, System.EventArgs) 99%	
NEW	1604	-	44	paydirect_ent 1.dll	void DoPayment(bool) 1%	
NEW	1598	-	43	paydirect_ent 1.dll	void OldBtnSubmitClick() 99%	
NEW	1603	-	41	paydirect_ent 1.dll	void OldBtnSubmitClick() 99%	
NEW	1614	-	31	paydirect_ent 1.dll	void OldPageLoad() 75%	
NEW	1673	-	22	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 38%	
NEW	1575	-	59	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 77%	
NEW	1573	-	56	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 98%	
NEW	1586	-	76	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 98%	
NEW	1588	-	77	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 99%	
NEW	1667	-	23	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 99%	
NEW	1674	-	22	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 99%	
NEW	1597	-	42	paydirect_ent 1.dll	void PaymentItem(CustomerInformationResponse) 99%	

Low (44 flaws)

Information Leakage(32 flaws)

Description

An information leak is the intentional or unintentional disclosure of information that is either regarded as sensitive within the product's own functionality or provides information about the product or its environment that could be useful in an attack. Information leakage issues are commonly overlooked because they cannot be used to directly exploit the application. However, information leaks should be viewed as building blocks that an attacker uses to carry out other, more complicated attacks.

There are many different types of problems that involve information leaks, with severities that can range widely depending on the type of information leaked and the context of the information with respect to the application. Common sources of information leakage include, but are not limited to:

* Source code disclosure
* Browsable directories
* Log files or backup files in web-accessible directories
* Unfiltered backend error messages
* Exception stack traces
* Server version information
* Transmission of uninitialized memory containing sensitive data

Recommendations

Configure applications and servers to return generic error messages and to suppress stack traces from being displayed to end users. Ensure that errors generated by the application do not provide insight into specific backend issues.

Remove all backup files, binary archives, alternate versions of files, and test files from web-accessible directories of production servers. The only files that should be present in the application's web document root are files required by the application. Ensure that deployment procedures include the removal of these file types by an administrator. Keep web and application servers fully patched to minimize exposure to publicly-disclosed information leakage vulnerabilities.

Associated Flaws by CWE ID:

➡ **Generation of Error Message Containing Sensitive Information (CWE ID 209)(30 flaws)**

Description

The software generates an error message that includes sensitive information about its environment, users, or associated data. The sensitive information may be valuable information (such as a password), or it may be useful for launching other, more deadly attacks. If an attack fails, [...] use error information provided by the server to launch another more focused attack. For example, file locations disclosed by an exception stack trace may be leveraged by an attacker to exploit a path traversal issue elsewhere in the application.
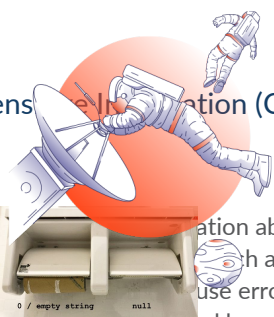
Effort to Fix: 1 - Trivial implementation error. Fix is up to 5 lines of code. One hour or less to fix.

Recommendations

Ensure that only generic error messages are returned to the end user that do not reveal any additional details.

Instances found via Static Scan

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1632	-	42	paydirect_ent 1.dll	bool ValidateCustomerAndMapResponse(string, string, string, ref System.Collections.ArrayList /*1*/, ref string /*1*/) 99%	
NEW	1659	-	26	paydirect_ent 1.dll	void btnSearch_Click(object, System.EventArgs) 92%	
NEW	1662	-	27	paydirect_ent 1.dll	void btnSearch_Click(object, System.EventArgs) 92%	
NEW	1643	-	39	paydirect_ent 1.dll	void btnSubmit_Click(object, System.EventArgs) 95%	
NEW	1670	-	30	paydirect_ent 1.dll	void btnSubmit_Click(object, System.EventArgs) 99%	
NEW	1635	-	44	paydirect_ent 1.dll	void DoPayment(bool) 80%	
NEW	1636	-	44	paydirect_ent 1.dll	void DoPayment(bool) 86%	

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1654	-	35	paydirect_ent 1.dll	void DoUpload() 87%	
NEW	1655	-	35	paydirect_ent 1.dll	void DoUpload() 92%	
NEW	1656	-	35	paydirect_ent 1.dll	void DoUpload() 97%	
NEW	1650	-	33	paydirect_ent 1.dll	void GenerateQRCodeImage(string, string, string) 24%	
NEW	1660	-	26	paydirect_ent 1.dll	void lb_show_all_Click(object, System.EventArgs) 92%	
NEW	1661	-	27	paydirect_ent 1.dll	void lb_show_all_Click(object, System.EventArgs) 92%	
NEW	1633	-	43	paydirect_ent 1.dll	void OldBtnSubmitClick() 97%	
NEW	1634	-	41	paydirect_ent 1.dll	void OldBtnSubmitClick() 97%	
NEW	1642	-	38	paydirect_ent 1.dll	void OldBtnSubmitClick() 99%	
NEW	1663	-	45	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 33%	
NEW	1629	-	83	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 41%	
NEW	1630	-	83	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 55%	
NEW	1651	-	36	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 93%	
NEW	1653	-	35	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 95%	
NEW	1652	-	32	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 98%	
NEW	1657	-	37	paydirect_ent 1.dll	void Page_Load(object, System.EventArgs) 98%	
NEW	1631	-	42	paydirect_ent 1.dll	void PaymentItem(CustomerInformationResponse) 97%	
NEW	1639	-	44	paydirect_ent 1.dll	void SendBillerTransactionAndLogResponse(EnterpriseProducts.Paydirect.BusinessLogic.BusinessFacade.EnterpriseProductPayLog) 19%	
NEW	1640	-	44	paydirect_ent 1.dll	void SendBillerTransactionAndLogResponse(EnterpriseProducts.Paydirect.BusinessLogic.BusinessFacade.EnterpriseProductPayLog) 94%	
NEW	1624	-	17	paydirect_ent 1.dll	void ShowMessage(string, System.Drawing.Color) 18%	
NEW	1658	-	82	paydirect_ent 1.dll	void ShowMessage(string, System.Drawing.Color) 18%	
NEW	1637	-	44	paydirect_ent 1.dll	void ShowTransactionMessages(EnterpriseProducts.Paydirect.BusinessLogic.BusinessFacade.EnterpriseProductPayLog, EnterpriseProducts.Paydirect.dto.RealtimePaymentRequest, EnterpriseProducts.Paydirect.BusinessLogic.BusinessFacade.EnterpriseProduct) 61%	
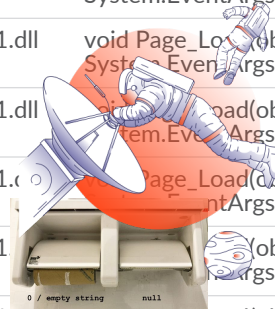
	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1638	-	44	paydirect_ent 1.dll	void ShowTransactionMessages(EnterprisePro ducts.Paydirect.BusinessLogic.BusinessFa cade.EnterpriseProductPayLog, EnterpriseProducts.Paydirect.dto.Realtim ePaymentRequest, EnterpriseProducts.Paydirect.BusinessLo gic.BusinessFacade.EnterpriseProduct) 95%	

→ Insertion of Sensitive Information Into Sent Data (CWE ID 201)(2 flaws)

Description

Sensitive information may be exposed as a result of outbound network connections made by the application.

Effort to Fix: 2 - Implementation error. Fix is approx. 6-50 lines of code. 1 easy to fix.

Recommendations

Ensure that the transfer of sensitive data is intended and does not violate the application security policy or user expectations.

Instances found via Static Scan

	Flaw Id	Module #	Class #	Module	Location	Fix By
NEW	1668	-	45	paydirect_ent 1.dll	bool ValidateCashLimit(decimal, int, EnterpriseProducts.Paydirect.BusinessLo gic.BusinessFacade.EnterpriseProductPay Log, string) 65%	
NEW	1669	-	45	paydirect_ent 1.dll	bool ValidateCashLimit(decimal, int, EnterpriseProducts.Paydirect.BusinessLo gic.BusinessFacade.EnterpriseProductPay Log, string) 92%	

→ Insufficient Input Validation(12 flaws)

Description

Weaknesses in this category are related to an absent or incorrect protection mechanism that fails to properly validate input that can affect the control flow or data flow of a program.

Recommendations

Validate input from untrusted sources before it is used. The untrusted data sources may include HTTP requests, file systems, databases, and any external systems that provide data to the application. In the case of HTTP requests, validate all parts of the request, including headers, form fields, cookies, and URL components that are used to transfer information from the browser to the server side application.

Duplicate any client-side checks on the server side. This should be simple to implement in terms of time and difficulty, and will greatly reduce the likelihood of insecure parameter values being used in the application.

Associated Flaws by CWE ID:

➡ **ASP.NET Misconfiguration: Improper Model Validation (CWE ID 1174)(12 flaws)**

Description

The ASP.NET application does not use, or incorrectly uses, the model validation framework.

Effort to Fix: 3 - Complex implementation error. Fix is approx. 51-500 lines of code. Up to 5 days to fix.

Instances found via Static Scan

	Flaw Id	Module #	Class #	Module	Location	Fix By
	727	-	29	paydirect_ent 1.dll	string get_AccountNumber() 0%	
NEW	1626	-	13	paydirect_ent 1.dll	string get_Comments() 0%	
NEW	1628	-	14	paydirect_ent 1.dll	string get_Comments() 0%	
NEW	1647	-	29	paydirect_ent 1.dll	string get_CustomerReference() 0%	
NEW	1641	-	20	paydirect_ent 1.dll	string get_ModifiedBy() 0%	
NEW	1644	-	29	paydirect_ent 1.dll	string get_Pan() 0%	
NEW	1646	-	29	paydirect_ent 1.dll	string get_PaymentReference() 0%	
NEW	1645	-	29	paydirect_ent 1.dll	string get_PhoneNumber() 0%	
NEW	1625	-	13	paydirect_ent 1.dll	string get_Reason() 0%	
NEW	1627	-	14	paydirect_ent 1.dll	string get_Reason() 0%	
NEW	1649	-	19	paydirect_ent 1.dll	System.Web.Http.IHttpActionResult FindSettlement(string) 0%	
NEW	1648	-	18	paydirect_ent 1.dll	System.Web.Mvc.ActionResult Index(Model.ProductDocumentTemplate, long) 0%	

Very Low (0 flaws)

No flaws of this type were found

Info (2 flaws)

➡ **Code Quality(2 flaws)**

Description

Code quality issues stem from failure to follow good coding practices and can lead to unpredictable behavior. These may include but are not limited to:

* Neglecting to remove debug code or dead code
* Improper resource management, such as using a pointer after it has been freed
* Using the incorrect operator to compare objects
* Failing to follow an API or framework specification
* Using a language feature or API in an unintended manner

While code quality flaws are generally less severe than other categories and usually are not directly exploitable, they may serve as indicators that developers are not following practices that increase the reliability and security of an application. For an attacker, code quality issues may provide an opportunity to stress the application in unexpected ways.

Recommendations

The wide variance of code quality issues makes it impractical to generalize how these issues should be addressed. Refer to individual categories for specific recommendations.

Associated Flaws by CWE ID:

→ **Improper Resource Shutdown or Release (CWE ID 404)(2 flaws)**

Description

The application fails to release (or incorrectly releases) a system resource before it is made available for re-use. This condition often occurs with resources such as database connections or file handles. Most unreleased resource issues result in general software reliability problems, but if an attacker can intentionally trigger a resource leak, it may be possible to launch a denial of service attack by depleting the resource pool.

Effort to Fix: 2 - Implementation error. Fix is approx. 6-50 lines of code. 1 day to fix.

Recommendations

When a resource is created or allocated, the developer is responsible for properly releasing the resource as well as accounting for all potential paths of expiration or invalid...... that all code paths properly release resources.

Instances found via Static Scan

|	Flaw Id	Module #	Class #	Module		Fix By
NEW	1671	-	15	paydirect_ent 1	vc.ActionResult tring) 40%	
NEW	1672	-	35	paydirect_ent 1.dll	void DoUpload() 31%	

About Veracode's Methodology

The Veracode platform uses static and dynamic analysis (for web applications) to identify software security flaws in your applications. Using both static and dynamic analysis helps reduce false negatives and detect a broader range of security flaws. Veracode static analysis models the application into an intermediate representation, which is then analyzed for security flaws using a set of automated security tests. Dynamic analysis uses an automated penetration testing technique to detect security flaws at runtime. Once the automated process is complete, a security technician verifies the output to ensure the lowest false positive rates in the industry. The end result is an accurate list of security flaws for the classes of automated scans applied to the application.

Veracode Rating System Using Multiple Analysis Techniques

Higher assurance applications require more comprehensive analysis to accurately score their security quality. Because each analysis technique (automated static, automated dynamic, manual penetration testing or manual review) has differing false negative (FN) rates for different types of security flaws, any single analysis technique or even combination of techniques is bound to produce a certain level of false negatives. Some false negatives are acceptable for lower business critical applications, so a less expensive analysis using only one or two analysis techniques is acceptable. At higher business criticality the FN rate should be close to zero, so multiple analysis techniques are recommended.

Application Security Policies

The Veracode platform allows an organization to define and enforce a unique application security policy across all applications in its portfolio. The elements of an application security policy include the target Veracode Level for the application; types of flaws that should not be in the application (which may be defined by flaw severity, flaw category, CWE, or a common standard including OWASP, CWE/SANS Top 25, or PCI); minimum Veracode security score; required scan types and frequencies; and grace period within which any policy-relevant flaws should be fixed.
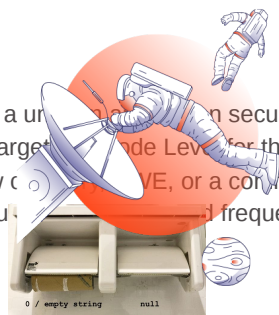
Policy constraints

Policies have three main constraints that can be applied: rules, required scans, and remediation grace periods.

Evaluating applications against a policy

When an application is evaluated against a policy, it can receive one of four assessments:

Not assessed The application has not yet had a scan published
Passed The application has passed all the aspects of the policy, including rules, required scans, and grace period.
Did not pass The application has not completed all required scans; has not achieved the target Veracode Level; or has one or more policy relevant flaws that have exceeded the grace period to fix.
Conditional pass The application has one or more policy relevant flaws that have not yet exceeded the grace period to fix.

Understand Veracode Levels

The Veracode Level (VL) achieved by an application is determined by type of testing performed on the application, and the severity and types of flaws detected. A minimum security score (defined below) is also required for each level.

There are five Veracode Levels denoted as VL1, VL2, VL3, VL4, and VL5. VL1 is the lowest level and is achieved by demonstrating that security testing, automated static or dynamic, is utilized during the SDLC. VL5 is the highest level and is achieved by performing automated and manual testing and removing all significant flaws. The Veracode Levels VL2, VL3, and VL4 form a continuum of increasing software assurance between VL1 and VL5.

For IT staff operating applications, Veracode Levels can be used to set application security policies. For deployment scenarios of different business criticality, differing VLs should be made requirements. For example, the policy for applications that handle credit card transactions, and therefore have PCI compliance requirements, should be VL5. A medium business criticality internal application could have a policy requiring VL3.

Software developers can decide which VL they want to achieve based on the requirements of their customers. Developers of software that is mission critical to most of their customers will want to achieve VL5. Developers of general purpose business software may want

to achieve VL3 or VL4. Once the software has achieved a Veracode Level it can be communicated to customers through a Veracode Report or through the Veracode Directory on the Veracode web site.

Criteria for achieving Veracode Levels

The following table defines the details to achieve each Veracode Level. The criteria for all columns: Flaw Severities Not Allowed, Flaw Categories not Allowed, Testing Required, and Minimum Score.

*Dynamic is only an option for web applications.

Veracode Level	Flaw Severities Not Allowed	Testing Required*	Minimum Score
VL5	V.High, High, Medium	Static AND Manual	90
VL4	V.High, High, Medium	Static	80
VL3	V.High, High	Static	70
VL2	V.High	Static OR Dynamic OR Manual	60
VL1		Static OR Dynamic OR Manual	

When multiple testing techniques are used it is likely that not all testing was performed on the exact same build. If that is the case the latest test results from a particular technique will be used to calculate the current Veracode Level. After 6 months test results will be deemed out of date and will no longer be used to calculate the current Veracode Level.
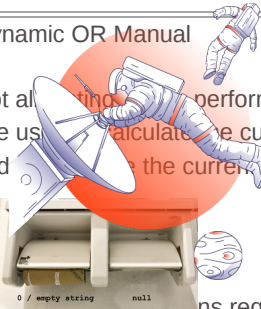
Business Criticality

The foundation of the Veracode rating system is the concept that more critical applications require higher security quality scores to be acceptable risks. Less business critical applications can tolerate lower security quality. The business criticality is dictated by the typical deployed environment and the value of data used by the application. Factors that determine business criticality are: reputation damage, financial loss, operational risk, sensitive information disclosure, personal safety, and legal violations.

US. Govt. OMB Memorandum M-04-04; NIST FIPS Pub. 199

Business Criticality	Description
Very High	Mission critical for business/safety of life and limb on the line
High	Exploitation causes serious brand damage and financial loss with long term business impact
Medium	Applications connected to the internet that process financial or private customer information
Low	Typically internal applications with non-critical business impact
Very Low	Applications with no material business impact

Business Criticality Definitions

Very High (BC5) This is typically an application where the safety of life or limb is dependent on the system; it is mission critical the application maintain 100% availability for the long term viability of the project or business. Examples are control software for industrial, transportation or medical equipment or critical business systems such as financial trading systems.

High (BC4) This is typically an important multi-user business application reachable from the internet and is critical that the application maintain high availability to accomplish its mission. Exploitation of high criticality applications cause serious brand damage and business/financial loss and could lead to long term business impact.

Medium (BC3) This is typically a multi-user application connected to the internet or any system that processes financial or private customer information. Exploitation of medium criticality applications typically result in material business impact resulting

in some financial loss, brand damage or business liability. An example is a financial services company's internal 401K management system.

Low (BC2) This is typically an internal only application that requires low levels of application security such as authentication to protect access to non-critical business information and prevent IT disruptions. Exploitation of low criticality applications may lead to minor levels of inconvenience, distress or IT disruption. An example internal system is a conference room reservation or business card order system.

Very Low (BC1) Applications that have no material business impact should its confidentiality, data integrity and availability be affected. Code security analysis is not required for applications at this business criticality, and security spending should be directed to other higher criticality applications.

Scoring Methodology

The Veracode scoring system, Security Quality Score, is built on the foundation of two industry standards, the Common Weakness Enumeration (CWE) and Common Vulnerability Scoring System (CVSS). CWE provides the dictionary of security flaws and CVSS provides the foundation for computing severity, based on the potential Confidentiality, Integrity and Availability impact of a flaw if exploited.

The Security Quality Score is a single score from 0 to 100, where 0 is the most insecure application and 100 is an application with no detectable security flaws. The score calculation includes non-linear factors so that, for instance, a single Severity 5 flaw is weighted more heavily than five Severity 1 flaws, and so that each additional flaw at a given severity contributes progressively less to the score.

Veracode assigns a severity level to each flaw type based on three foundational application security requirements — Confidentiality, Integrity and Availability. Each of the severity levels reflects the potential impact if a security breach occurs across one or more of these security dimensions.

Confidentiality Impact

According to CVSS, this metric measures the impact on confidentiality should occur using the vulnerability on the target system. At the weakness level, the scope of the Confidentiality impact is within an application and is measured at three levels of impact -None, Partial and Complete.

Integrity Impact

This metric measures the potential impact on integrity of the application being analyzed. Integrity refers to the trustworthiness and guaranteed veracity of information within the application. Integrity measures are meant to protect data from unauthorized modification. When the integrity of a system is sound, it is fully proof from unauthorized modification of its contents.

Availability Impact

This metric measures the potential impact on availability if a successful exploit of the vulnerability is carried out on a target application. Availability refers to the accessibility of information resources. Almost exclusive to this domain are denial-of-service vulnerabilities. Attacks that compromise authentication and authorization for application access, application memory, and administrative privileges are examples of impact on the availability of an application.

Security Quality Score Calculation

The overall Security Quality Score is computed by aggregating impact levels of all weaknesses within an application and representing the score on a 100 point scale. This score does not predict vulnerability potential as much as it enumerates the security weaknesses and their impact levels within the application code.

The Raw Score formula puts weights on each flaw based on its impact level. These weights are exponential and determined by empirical analysis by Veracode's application security experts with validation from industry experts. The score is normalized to a scale of 0 to 100, where a score of 100 is an application with 0 detected flaws using the analysis technique for the application's business criticality.

Understand Severity, Exploitability, and Remediation Effort

Severity and exploitability are two different measures of the seriousness of a flaw. Severity is defined in terms of the potential impact to confidentiality, integrity, and availability of the application as defined in the CVSS, and exploitability is defined in terms of the likelihood

or ease with which a flaw can be exploited. A high severity flaw with a high likelihood of being exploited by an attacker is potentially more dangerous than a high severity flaw with a low likelihood of being exploited.

Remediation effort, also called Complexity of Fix, is a measure of the likely effort required to fix a flaw. Together with severity, the remediation effort is used to give Fix First guidance to the developer.

Veracode Flaw Severities

Veracode flaw severities are defined as follows:

Severity	Description
Very High	The offending line or lines of code is a very serious weakness and is an easy target for an attacker. The code should be modified immediately to avoid potential attacks.
High	The offending line or lines of code have significant weakness, and the code should be modified immediately to avoid potential attacks.
Medium	A weakness of average severity. These should be fixed in high assurance software. A fix for this weakness should be considered after fixing the very high and high for medium assurance software.
Low	This is a low priority weakness that will have a small impact on the security of the software. Fixing should be consideration for high assurance software. Medium and low assurance software can ignore these flaws.
Very Low	Minor problems that some high assurance software should be aware of. These flaws can be safely ignored in medium and low assurance software.
Informational	Issues that have no impact on the security quality of the application but which may be of interest to the reviewer.

Informational findings

Informational severity findings are items observed in the analysis of the application that have no impact on the security quality of the application but may be interesting to the reviewer for other reasons. These findings may include code quality issues, API usage, and other factors.

Informational severity findings have no impact on the security quality score of the application and are not included in the summary tables of flaws for the application.

Exploitability

Each flaw instance in a static scan may receive an exploitability rating. The rating is an indication of the intrinsic likelihood that the flaw may be exploited by an attacker. Veracode recommends that the exploitability rating be used to prioritize flaw remediation within a particular group of flaws with the same severity and difficulty of fix classification.

The possible exploitability ratings include:

Exploitability	Description
V. Unlikely	Very unlikely to be exploited
Unlikely	Unlikely to be exploited

Exploitability	Description
Neutral	Neither likely nor unlikely to be exploited.
Likely	Likely to be exploited
V. Likely	Very likely to be exploited

Note: All reported flaws found via dynamic scans are assumed to be exploitable, because the dynamic scan actually executes the attack in question and verifies that it is valid.

Effort/Complexity of Fix

Each flaw instance receives an effort/complexity of fix rating based on the classification of the flaw. The effort/complexity of fix rating is given on a scale of 1 to 5, as follows:

Effort/Complexity of Fix	Description
5	Complex design error. Requires significant redesign.
4	Simple design error. Requires redesign and up to days to fix.
3	Complex implementation error. Fix is 1-500 lines of code. Up to 5 days to fix.
2	Implementation error. Fix is approx. 1 day to fix.
1	Trivial implementation error. Fix is . One hour or less to fix.
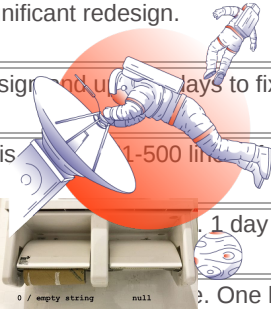
Flaw Types by Severity Level

The flaw types by severity level table provides a summary of flaws found in the application by Severity and Category. The table puts the Security Quality Score into context by showing the specific breakout of flaws by severity, used to compute the score as described above. If multiple analysis techniques are used, the table includes a breakout of all flaws by category and severity for each analysis type performed.

Flaws by Severity

The flaws by severity chart shows the distribution of flaws by severity. An application can get a mediocre security rating by having a few high risk flaws or many medium risk flaws.

Flaws in Common Modules

The flaws in common modules listing shows a summary of flaws in shared dependency modules in this application. A shared dependency is a dependency that is used by more than one analyzed module. Each module is listed with the number of executables that consume it as a dependency and a summary of the impact on the application's security score of the flaws found in the dependency.

The score impact represents the amount that the application score would increase if all the flaws in the shared dependency module were fixed. This information can be used to focus remediation efforts on common modules with a higher impact on the application security score.

 Only common modules that were uploaded with debug information are included in the Flaws in Common Modules listing.

Action Items

The Action Items section of the report provides guidance on the steps required to bring the application to a state where it passes its assigned policy. These steps may include fixing or mitigating flaws or performing additional scans. The section also includes best practice recommendations to improve the security quality of the application.

Common Weakness Enumeration (CWE)

The Common Weakness Enumeration (CWE) is an industry standard classification of types of software weaknesses, or flaws, that can lead to security problems. CWE is widely used to provide a standard taxonomy of software errors. Every flaw in a Veracode report is classified according to a standard CWE identifier.

More guidance and background about the CWE is available at http://cwe.mitre.org/data/index.html.

About Manual Assessments

The Veracode platform can include the results from a manual assessment (usually a penetration test or code review) as part of a report. These results differ from the results of automated scans in several important ways, including objectives, attack vectors, and common attack patterns.

A manual penetration assessment is conducted to observe the application code in a run-time environment and to simulate real-world attack scenarios. Manual testing is able to identify design flaws, evaluate environmental conditions, compound multiple lower risk flaws into higher risk vulnerabilities, and determine if identified flaws affect the confidentiality, integrity, or availability of the application.

Objectives

The stated objectives of a manual penetration assessment are:

- Perform testing, using proprietary and/or public tools, to determine whether it is possible for an attacker to:
- Circumvent authentication and authorization mechanisms
- Escalate application user privileges
- Hijack accounts belonging to other users
- Violate access controls placed by the site administrator
- Alter data or data presentation
- Corrupt application and data integrity, functionality and performance
- Circumvent application business logic
- Circumvent application session management
- Break or analyze use of cryptography within user accessible components
- Determine possible extent access or impact to the system by attempting to exploit vulnerabilities
- Score vulnerabilities using the Common Vulnerability Scoring System (CVSS)
- Provide tactical recommendations to address security issues of immediate consequence

Provide strategic recommendations to enhance security by leveraging industry best practices

Attack vectors

In order to achieve the stated objectives, the following tests are performed as part of the manual penetration assessment, when applicable to the platforms and technologies in use:

- Cross Site Scripting (XSS)
- SQL Injection
- Command Injection
- Cross Site Request Forgery (CSRF)
- Authentication/Authorization Bypass
- Session Management testing, e.g. token analysis, session expiration, and logout effectiveness
- Account Management testing, e.g. password strength, password reset, account lockout, etc.
- Directory Traversal
- Response Splitting
- Stack/Heap Overflows
- Format String Attacks
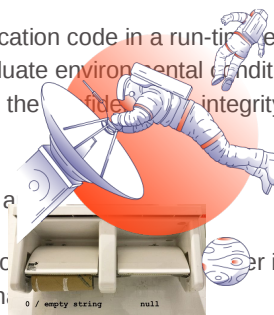
- Cookie Analysis
- Server Side Includes Injection
- Remote File Inclusion
- LDAP Injection
- XPATH Injection
- Internationalization attacks
- Denial of Service testing at the application layer only
- AJAX Endpoint Analysis
- Web Services Endpoint Analysis
- HTTP Method Analysis
- SSL Certificate and Cipher Strength Analysis
- Forced Browsing

CAPEC Attack Pattern Classification

The following attack pattern classifications are used to group similar application flaws discovered during manual penetration testing. Attack patterns describe the general methods employed to access and exploit the specific weaknesses that exist within an application. CAPEC (Common Attack Pattern Enumeration and Classification) is an effort led by Cigital, Inc. and is sponsored by the United States Department of Homeland Security's National Cyber Security Division.

Abuse of Functionality

Exploitation of business logic errors or misappropriation of programmatic resources. Application functions are developed to specifications with particular intentions, and these types of attacks serve to undermine those intentions.

Examples:

- Exploiting password recovery mechanisms
- Accessing unpublished or test APIs
- Cache poisoning
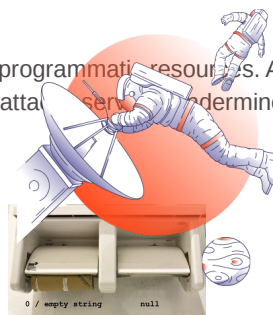
Spoofing

Impersonation of entities or trusted resources. A successful attack will present itself to a verifying entity with an acceptable level of authenticity.

Examples:

- Man in the middle attacks
- Checksum spoofing
- Phishing attacks

Probabilistic Techniques

Using predictive capabilities or exhaustive search techniques in order to derive or manipulate sensitive information. Attacks capitalize on the availability of computing resources or the lack of entropy within targeted components.

Examples:

- Password brute forcing
- Cryptanalysis
- Manipulation of authentication tokens

Exploitation of Authentication

Circumventing authentication requirements to access protected resources. Design or implementation flaws may allow authentication checks to be ignored, delegated, or bypassed.

Examples:

- Cross-site request forgery
- Reuse of session identifiers
- Flawed authentication protocol

Resource Depletion

Affecting the availability of application components or resources through symmetric or asymmetric consumption. Unrestricted access to computationally expensive functions or implementation flaws that affect the stability of the application can be targeted by an attacker in order to cause denial of service conditions.

Examples:

- Flooding attacks
- Unlimited file upload size
- Memory leaks

Exploitation of Privilege/Trust

Undermining the application's trust model in order to gain access to protected resources or gain additional levels of access as defined by the application. Applications that implicitly extend trust to resources or entities outside of their direct control are susceptible to attack.

Examples:

- Insufficient access control lists
- Circumvention of client side protections
- Manipulation of role identification information

Injection

Inserting unexpected inputs to manipulate control flow or alter normal business processing. Applications must contain sufficient data validation checks in order to sanitize tainted data and prevent malicious, external control over internal processing.

Examples:

- SQL Injection
- Cross-site scripting
- XML Injection
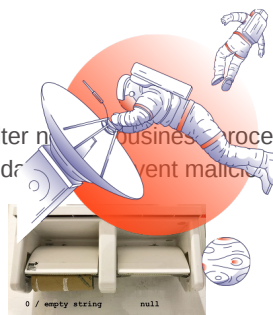
Data Structure Attacks

Supplying unexpected or excessive data that results in more data being written to a buffer than it is capable of holding. Successful attacks of this class can result in arbitrary command execution or denial of service conditions.

Examples:

- Buffer overflow
- Integer overflow
- Format string overflow

Data Leakage Attacks

Recovering information exposed by the application that may itself be confidential or may be useful to an attacker in discovering or exploiting other weaknesses. A successful attack may be conducted passive observation or active interception methods. This attack pattern often manifests itself in the form of applications that expose sensitive information within error messages.

Examples:

- Sniffing clear-text communication protocols
- Stack traces returned to end users
- Sensitive information in HTML comments

Resource Manipulation

Manipulating application dependencies or accessed resources in order to undermine security controls and gain unauthorized access to protected resources. Applications may use tainted data when constructing paths to local resources or when constructing processing environments.

Interswitch and Veracode Confidential

Examples:

- Carriage Return Line Feed log file injection
- File retrieval via path manipulation
- User specification of configuration files

Time and State Attacks

Undermining state condition assumptions made by the application or capitalizing on time delays between security checks and performed operations. An application that does not enforce a required processing sequence or does not handle concurrency adequately will be susceptible to these attack patterns.

Examples:

- Bypassing intermediate form processing steps
- Time-of-check and time-of-use race conditions
- Deadlock triggering to cause a denial of service

Terms of Use

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Appendix A: Changes from Last Scan

Latest Scan		Prior Scan	
Static Scan			
Scan Name:	11 Dec 2023 Static (2)	Scan Name:	11 Dec 2023 Static
Completed:	11/12/23	Completed:	11/12/23
Score:	77	Score:	54

Changes in scope of scan (static)

New Modules

Module Name	Compiler	Operating Environment	Engine Version
paydirect_ent 1.dll	MSIL_MSVC14_X86	Windows	202311291 65901

Removed modules

Module Name	Compiler	Operating Environment	Engine Version
eWorld.UI.Compatibility.dll	MSIL_MSVC8_X86	Windows	202311291 65901
JS files within PaydirectENT 4.zip	JAVASCRIPT_5_1	JavaScript	202311291 65901
paydirect_ent.dll	MSIL_MSVC14_X86	Windows	202311291 65901
TSQL Files	TSQL	TSQL	202311031 81141
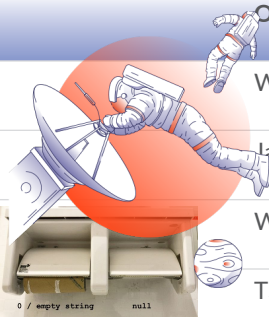
Flaws not detected in current scan

The following is a list of all flaws found in the prior scan of this application that were not detected in the current scan.

Very High (1 flaw)

→ Code Injection(1 flaw)

Associated Flaws by CWE ID:

→ Improper Neutralization of Directives in Dynamically Evaluated Code ('Eval Injection') (CWE ID 95)(1 flaw)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location		Fix By
234	82	-	JS files within PaydirectENT 4.zip	/.../scripts/knockout.debug.js 364		

Medium (806 flaws)

→ **Authentication Issues(42 flaws)**

Associated Flaws by CWE ID:

→ **Cross-Site Request Forgery (CSRF) (CWE ID 352)(42 flaws)**

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
779	13	-	paydirect_ent.dll	.../budgetscontroller.cs 254	
776	17	-	paydirect_ent.dll	.../chequepaymentreportcontroller.cs 57	
777	17	-	paydirect_ent.dll	.../chequepaymentreportcontroller.cs 151	
709	32	-	paydirect_ent.dll	.../customercontroller.cs 153	
774	32	-	paydirect_ent.dll	.../customercontroller.cs 245	
775	32	-	paydirect_ent.dll	.../customercontroller.cs 309	
705	59	-	paydirect_ent.dll	.../fiscalyearscontroller.cs 72	
707	59	-	paydirect_ent.dll	.../fiscalyearscontroller.cs 129	
646	60	-	paydirect_ent.dll	.../flexiblesettlementcontroller.cs 25	
703	60	-	paydirect_ent.dll	.../flexiblesettlementcontroller.cs 152	
1367	63	-	paydirect_ent.dll	.../functioncontroller.cs 84	
1369	63	-	paydirect_ent.dll	.../functioncontroller.cs 123	
643	75	-	paydirect_ent.dll	jenkins/.../homecontroller.cs 47	
644	75	-	paydirect_ent.dll	jenkins/.../homecontroller.cs 73	
645	75	-	paydirect_ent.dll	jenkins/.../homecontroller.cs 99	
1363	78	-	paydirect_ent.dll	.../injectcontroller.cs 99	
1365	78	-	paydirect_ent.dll	.../injectcontroller.cs 168	
1361	90	-	paydirect_ent.dll	.../nibssaccountcontroller.cs 37	
1310	92	-	paydirect_ent.dll	.../nibsspaymentcontroller.cs 65	
1306	96	-	paydirect_ent.dll	.../notificationtemplatecontroller.cs 83	
1308	96	-	paydirect_ent.dll	.../notificationtemplatecontroller.cs 140	
642	137	-	paydirect_ent.dll	.../paymentsreversalreportcontroller.cs 25	
641	143	-	paydirect_ent.dll	.../productdumenttemplatecontroller.cs 50	
638	158	-	paydirect_ent.dll	.../reportscontroller.cs 420	
639	158	-	paydirect_ent.dll	.../reportscontroller.cs 434	
1302	164	-	paydirect_ent.dll	jenkins/.../rolecontroller.cs 77	
1304	164	-	paydirect_ent.dll	jenkins/.../rolecontroller.cs 108	
1300	165	-	paydirect_ent.dll	.../rolefunctioncontroller.cs 127	
1296	167	-	paydirect_ent.dll	.../rolegroupcontroller.cs 64	

Flaw Id	Module #	Class #	Module	Location	Fix By
1298	167	-	paydirect_ent.dll	.../rolegroupcontroller.cs 93	
1292	180	-	paydirect_ent.dll	.../servicemethodcontroller.cs 69	
1294	180	-	paydirect_ent.dll	.../servicemethodcontroller.cs 108	
1254	203	-	paydirect_ent.dll	.../systemmessagecontroller.cs 18	
1251	204	-	paydirect_ent.dll	.../systemsettingcontroller.cs 77	
1253	204	-	paydirect_ent.dll	.../systemsettingcontroller.cs 120	
1247	207	-	paydirect_ent.dll	.../terminalownercontroller.cs 72	
1249	207	-	paydirect_ent.dll	.../terminalownercontroller.cs 131	
1241	208	-	paydirect_ent.dll	.../terminalownermethodcallauthorisation controller.cs 119	
1243	208	-	paydirect_ent.dll	.../terminalownermethodcallauthorisation controller.cs 159	
1245	208	-	paydirect_ent.dll	.../terminalownermethodcallauthorisation controller.cs	
637	219	-	paydirect_ent.dll	.../unclearedpaymentsreportcontroller.cs 32	
1240	222	-	paydirect_ent.dll	.../...controller.cs 139	
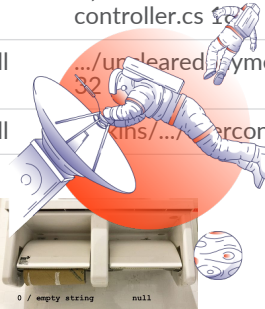
CRLF Injection(21 flaws)

Associated Flaws by CWE ID:

Improper Output Neutralization for Logs (CWE ID 117)(21 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1531	44	-	paydirect_ent.dll/paydirectx.core.dll	.../defaultconfigurationsynchandler.cs 53	
315	45	-	paydirect_ent.dll/paydirectx.core.dll	.../defaultcustomerinformationretrievalservice.cs 57	
331	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 25	
332	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 34	
335	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 162	
346	56	-	paydirect_ent.dll/techquest.framework.dll	.../exceptionlogger.cs 97	
330	66	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../getcustomer.cs 24	
333	66	-	paydirect_ent.dll/pa	jenkins/.../getcustomer.cs 32	

Flaw Id	Module #	Class #	Module	Location	Fix By
			ydirect_ent.core.dll		
334	66	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../getcustomer.cs 82	
366	73	-	paydirect_ent.dll/techquest.framework.dll	.../cce/util/hexconverter.cs 41	
306	73	-	paydirect_ent.dll/techquest.framework.dll	.../cce/util/hexconverter.cs 177	
237	93	-	JS files within PaydirectENT 4.zip	/.../scripts/NibssPaymentPopup.js 143	
336	141	-	paydirect_ent.dll/techquest.framework.dll	.../cce/postilionfacade.cs 926	
337	141	-	paydirect_ent.dll/techquest.framework.dll	.../cce/postilionfacade.cs 1057	
238	202	-	JS files within PaydirectENT 4.zip	/.../api-doc/l...swagger.js 546	
375	213	-	paydirect_ent.dll/techquest.framework.dll	...oj.../.../tqlogger.cs 142	
376	213	-	paydirect_ent.dll/techquest.framework.dll	s/.../tqlogger.cs 145	
342	213	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../tqlogger.cs 148	
343	213	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../tqlogger.cs 153	
344	213	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../tqlogger.cs 157	
345	213	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../tqlogger.cs 161	
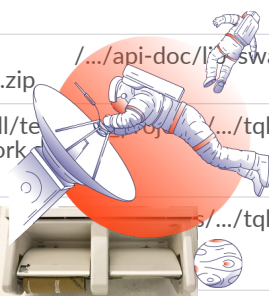
→ Credentials Management(10 flaws)

Associated Flaws by CWE ID:

→ Use of Hard-coded Credentials (CWE ID 798)(8 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1359	2	-	paydirect_ent.dll	.../payments/adjustments.aspx.cs 1	
1139	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 1	

Flaw Id	Module #	Class #	Module	Location	Fix By
1140	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 1	
347	56	-	paydirect_ent.dll/techquest.framework.dll	.../exceptionlogger.cs 160	
373	74	-	paydirect_ent.dll/techquest.framework.dll	.../highavailabilitymanager.cs 91	
374	74	-	paydirect_ent.dll/techquest.framework.dll	.../highavailabilitymanager.cs 168	
768	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 1	
769	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 1	

Use of Hard-coded Password (CWE ID 259)(2 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
308	25	-	paydirect_ent.dll ydirectx.core.dll	nkins/.../constants.cs 56	
320	40	-	paydirect_ent.dll ydirectx.core.dll	gotesecurityutil.cs 275	

Cross-Site Scripting (XSS)(595 flaws)

Associated Flaws by CWE ID:

Improper Neutralization of Script-Related HTML Tags in a Web Page (Basic XSS) (CWE ID 80)(595 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1360	2	-	paydirect_ent.dll	.../payments/adjustments.aspx.cs 65	
1421	2	-	paydirect_ent.dll	.../payments/adjustments.aspx.cs 71	
1422	2	-	paydirect_ent.dll	.../payments/adjustments.aspx.cs 72	
1423	2	-	paydirect_ent.dll	.../payments/adjustments.aspx.cs 73	
1424	2	-	paydirect_ent.dll	.../payments/adjustments.aspx.cs 75	
1461	3	-	paydirect_ent.dll	.../administratorreportsmenu.aspx.cs 56	
1462	3	-	paydirect_ent.dll	.../administratorreportsmenu.aspx.cs 428	
1463	3	-	paydirect_ent.dll	.../administratorreportsmenu.aspx.cs 430	
1459	4	-	paydirect_ent.dll	.../bankcachedtransactionslog.aspx.cs 64	

Flaw Id	Module #	Class #	Module	Location	Fix By
1457	5	-	paydirect_ent.dll	.../bankpaymentslog.aspx.cs 87	
1271	6	-	paydirect_ent.dll	.../bankpaymentslogprintable.aspx.cs 41	
1272	6	-	paydirect_ent.dll	.../bankpaymentslogprintable.aspx.cs 42	
1410	7	-	paydirect_ent.dll	.../banktransactionslog.aspx.cs 90	
1221	8	-	paydirect_ent.dll	.../banktransactionslogprintable.aspx.cs 39	
1270	8	-	paydirect_ent.dll	.../banktransactionslogprintable.aspx.cs 40	
236	11	-	JS files within PaydirectENT 4.zip	/.../scripts/apps/budget.js 8	
1358	15	-	paydirect_ent.dll	.../capturecreditnotes.aspx.cs 25	
1141	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 88	
1142	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 89	
1143	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 101	
1144	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 112	
1191	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 157	
1192	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 168	
1193	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 179	
1194	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 682	
1195	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 733	
1196	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 755	
1197	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 764	
1198	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 773	
1237	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 782	
1238	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 791	
1529	18	-	paydirect_ent.dll	.../chequesmonitoring.aspx.cs 83	
1494	19	-	paydirect_ent.dll	.../chequesmonitoringvanilla.aspx.cs 65	
1138	21	-	paydirect_ent.dll	.../common/commonnavbar.aspx.cs 48	
1493	20	-	paydirect_ent.dll	.../admin/commonnavbar.aspx.cs 59	
1492	22	-	paydirect_ent.dll	.../commonthirdpartynavbar.aspx.cs 62	
1137	23	-	paydirect_ent.dll	.../commonuploadnavbar.aspx.cs 47	
635	24	-	paydirect_ent.dll	.../confirmregistration.aspx.cs 39	
1135	31	-	paydirect_ent.dll	.../customaiicocapture.aspx.cs 38	
1136	31	-	paydirect_ent.dll	.../customaiicocapture.aspx.cs 39	
1407	33	-	paydirect_ent.dll	.../customerenquiry.aspx.cs 35	
1083	37	-	paydirect_ent.dll	.../common/customersearch.aspx.cs 47	
1084	37	-	paydirect_ent.dll	.../common/customersearch.aspx.cs 81	
1134	37	-	paydirect_ent.dll	.../common/customersearch.aspx.cs 84	
1483	38	-	paydirect_ent.dll	.../dangotebankguaranteereportdetails.aspx.cs 23	
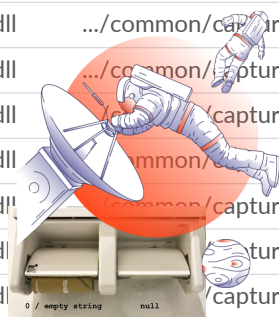
Flaw Id	Module #	Class #	Module	Location	Fix By
1481	39	-	paydirect_ent.dll	.../dangotebgreceipt.aspx.cs 50	
1482	39	-	paydirect_ent.dll	.../dangotebgreceipt.aspx.cs 78	
284	41	-	paydirect_ent.dll/paydirect_ent.core.dll	.../webform/dataformfieldbase.cs 102	
304	41	-	paydirect_ent.dll/paydirect_ent.core.dll	.../webform/dataformfieldbase.cs 190	
305	41	-	paydirect_ent.dll/paydirect_ent.core.dll	.../webform/dataformfieldbase.cs 207	
1355	48	-	paydirect_ent.dll	.../duplicateposting.aspx.cs 46	
1356	48	-	paydirect_ent.dll	.../duplicateposting.aspx.cs 47	
1357	48	-	paydirect_ent.dll	.../duplicateposting.aspx.cs 48	
1405	49	-	paydirect_ent.dll	.../duplicatepostingsreport.aspx.cs 84	
1406	49	-	paydirect_ent.dll	.../duplicatepostingsreport.aspx.cs 171	
1216	50	-	paydirect_ent.dll	.../duplicatepostingsreportprintable.aspx.cs 78	
1217	50	-	paydirect_ent.dll	.../duplicatepostingsreportprintable.aspx.	
1218	50	-	paydirect_ent.dll	.../duplicatepostingsreportprintable.aspx.	
1219	50	-	paydirect_ent.dll	.../duplicatepostingsreportprintable.aspx.	
1220	50	-	paydirect_ent.dll	.../duplicatepostingsreportprintable.aspx.cs 134	
1491	52	-	paydirect_ent.dll	.../admin/editpayitem.aspx.cs 38	
1486	53	-	paydirect_ent.dll	.../admin/editthirdparty.aspx.cs 41	
1487	53	-	paydirect_ent.dll	.../admin/editthirdparty.aspx.cs 42	
1488	53	-	paydirect_ent.dll	.../admin/editthirdparty.aspx.cs 43	
1489	53	-	paydirect_ent.dll	.../admin/editthirdparty.aspx.cs 48	
1490	53	-	paydirect_ent.dll	.../admin/editthirdparty.aspx.cs 55	
1081	57	-	paydirect_ent.dll	.../common/fileerrorinfo.aspx.cs 40	
1080	61	-	paydirect_ent.dll	.../common/floatcardsetup.aspx.cs 156	
1078	65	-	paydirect_ent.dll	.../common/generateqrcode.aspx.cs 87	
1215	69	-	paydirect_ent.dll	.../globalsettlementprintable.aspx.cs 36	
1214	70	-	paydirect_ent.dll	.../globalsettlementreportbybankprintable.aspx.cs 38	
1021	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 45	
1022	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 46	
1023	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 47	
1024	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 48	
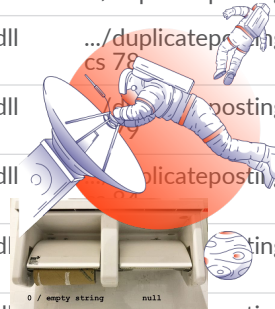
Flaw Id	Module #	Class #	Module	Location	Fix By
1025	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 49	
1026	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 50	
1027	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 52	
1436	86	-	paydirect_ent.dll	.../admin/managepayitem.aspx.cs 36	
1484	86	-	paydirect_ent.dll	.../admin/managepayitem.aspx.cs 57	
1485	86	-	paydirect_ent.dll	.../admin/managepayitem.aspx.cs 58	
1430	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 34	
1431	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 35	
1432	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 36	
1433	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 56	
1434	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 57	
1435	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 58	
1334	94	-	paydirect_ent.dll	.../elementsummarybypaymentty.aspx.cs	
1309	96	-	paydirect_ent.dll	.../ificationtemplatecontroller.cs 185	
1230	100	-	paydirect_ent.dll	.../approvalconfirm.aspx.cs 102	
1231	100	-	paydirect_ent.dll	.../approvalconfirm.aspx.cs 103	
1232	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 104	
1233	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 105	
1234	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 106	
1235	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 117	
1236	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 121	
1285	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 124	
1286	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 126	
1287	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 128	
1288	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 138	
1289	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 142	
1290	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 166	
1291	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 167	
1354	100	-	paydirect_ent.dll	.../paymentapprovalconfirm.aspx.cs 180	
1128	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 71	
1129	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 149	
1130	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 157	
1131	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 175	
1132	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 197	
1133	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 198	
1183	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 199	
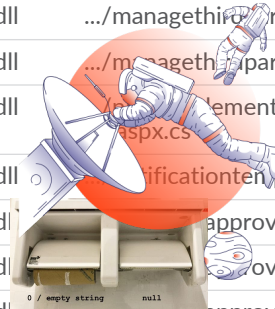
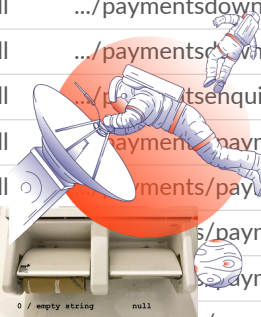| Flaw Id	Module #	Class #	Module	Location	Fix By
1184	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 200	
1185	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 202	
1186	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 205	
1187	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 217	
1188	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 224	
1189	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 273	
1190	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 274	
1229	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 284	
1332	102	-	paydirect_ent.dll	.../paymentcategorysummaryreport.aspx.cs 120	
1475	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 69	
1476	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 116	
1477	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 119	
1521	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 120	
1522	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 123	
1523	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 130	
1524	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 133	
1525	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 135	
1526	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 139	
1527	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 149	
1017	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 178	
1018	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 182	
1019	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 189	
1020	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 190	
1070	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 206	
1071	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 209	
1072	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 239	
1073	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 240	
1074	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 255	
1075	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 256	
1076	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 271	
1077	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 560	
1126	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 566	
1127	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 572	
1172	104	-	paydirect_ent.dll	.../paymentexceptionreportprintable.aspx.cs 39	
1173	104	-	paydirect_ent.dll	.../paymentexceptionreportprintable.aspx.cs 40	
1174	104	-	paydirect_ent.dll	.../paymentexceptionreportprintable.aspx	
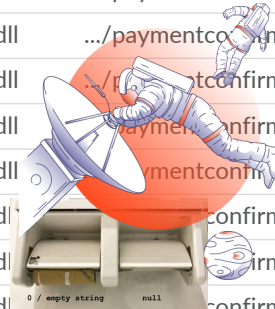
Flaw Id	Module #	Class #	Module	Location	Fix By
				.cs 41	
1175	104	-	paydirect_ent.dll	.../paymentexceptionreportprintable.aspx .cs 42	
235	105	-	JS files within PaydirectENT 4.zip	/.../scripts/apps/paymentgrid.js 34	
1560	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 204	
1352	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 399	
1353	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 460	
1419	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 509	
1420	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 576	
1471	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 579	
1472	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 580	
1473	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 581	
1349	107	-	paydirect_ent.dll	.../paymentinfo_dstv.aspx.cs 77	
1350	107	-	paydirect_ent.dll	.../paymentinfo_dstv.aspx.cs 118	
1280	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 387	
1281	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 448	
1282	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 497	
1283	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 564	
1284	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 567	
1346	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 568	
1347	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 569	
1279	109	-	paydirect_ent.dll	.../paymentitemselect.aspx.cs 83	
1330	111	-	paydirect_ent.dll	.../paymentnotificationreport.aspx.cs 52	
1331	111	-	paydirect_ent.dll	.../paymentnotificationreport.aspx.cs 61	
944	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1031	
945	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1061	
946	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1089	
947	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1114	
948	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1115	
1009	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1116	
1010	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1120	
1011	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1124	
1012	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1127	
1013	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1133	
1014	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1149	
1015	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1158	
1016	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1231	
1064	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1234	

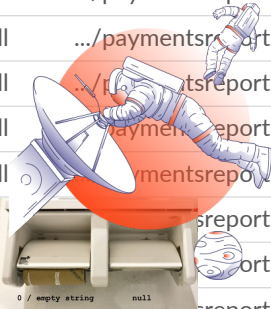| Flaw Id	Module #	Class #	Module	Location	Fix By
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1068	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1522	
1069	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1533	
1121	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1535	
1122	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1626	
1123	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1640	
1124	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1659	
1125	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1671	
1176	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1672	
1177	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1673	
1178	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1677	
1179	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1681	
1180	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1687	
1181	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1692	
1182	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1704	
1222	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1705	
1223	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1716	
1224	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 2443	
1225	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 2449	
1226	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 2455	
1227	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 2517	
1269	113	-	paydirect_ent.dll	.../paymentreversalreport.aspx.cs 24	
1213	114	-	paydirect_ent.dll	.../paymentsauthorization.aspx.cs 180	
1170	116	-	paydirect_ent.dll	.../paymentsauthorizationreportprintable. aspx.cs 33	
1171	116	-	paydirect_ent.dll	.../paymentsauthorizationreportprintable. aspx.cs 34	
1211	117	-	paydirect_ent.dll	.../paymentsbybanks.aspx.cs 53	
1169	118	-	paydirect_ent.dll	.../paymentsbybanksprintable.aspx.cs 38	
1208	119	-	paydirect_ent.dll	.../paymentsbybranches.aspx.cs 49	
1209	119	-	paydirect_ent.dll	.../paymentsbybranches.aspx.cs 113	
1119	120	-	paydirect_ent.dll	.../paymentsbybranchesprintable.aspx.cs 40	
1120	120	-	paydirect_ent.dll	.../paymentsbybranchesprintable.aspx.cs 41	
1168	120	-	paydirect_ent.dll	.../paymentsbybranchesprintable.aspx.cs 46	
1112	121	-	paydirect_ent.dll	.../paymentsbythirdpartyprintable.aspx.cs	
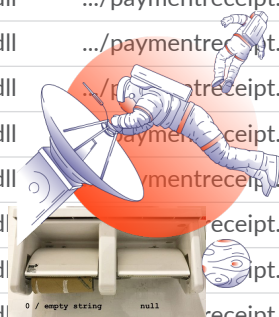
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1115	121	-	paydirect_ent.dll	.../paymentsbythirdpartyprintable.aspx.cs 42	
1116	121	-	paydirect_ent.dll	.../paymentsbythirdpartyprintable.aspx.cs 46	
1117	121	-	paydirect_ent.dll	.../paymentsbythirdpartyprintable.aspx.cs 47	
1118	121	-	paydirect_ent.dll	.../paymentsbythirdpartyprintable.aspx.cs 52	
1166	122	-	paydirect_ent.dll	.../paymentsdownloadreport.aspx.cs 55	
1167	122	-	paydirect_ent.dll	.../paymentsdownloadreport.aspx.cs 59	
1206	122	-	paydirect_ent.dll	.../paymentsdownloadreport.aspx.cs 128	
1164	123	-	paydirect_ent.dll	.../paymentsenquiry.aspx.cs 48	
770	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 149	
771	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 164	
772	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 165	
773	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 169	
823	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 171	
824	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 173	
825	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 262	
826	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 268	
827	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 323	
828	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 499	
829	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 500	
830	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 515	
880	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 516	
881	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 528	
882	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 601	
883	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 601	
884	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 642	
885	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 642	
886	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 868	
887	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 877	
943	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 915	
1162	125	-	paydirect_ent.dll	.../paymentsexceptionreport.aspx.cs 91	
1107	126	-	paydirect_ent.dll	.../paymentslogdetails.aspx.cs 132	

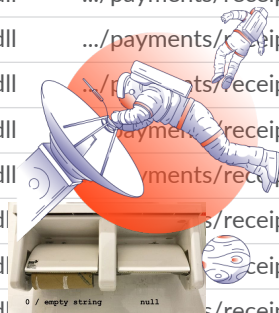| Flaw Id	Module #	Class #	Module	Location	Fix By
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1109	126	-	paydirect_ent.dll	.../paymentslogdetails.aspx.cs 346	
1110	126	-	paydirect_ent.dll	.../paymentslogdetails.aspx.cs 589	
1111	126	-	paydirect_ent.dll	.../paymentslogdetails.aspx.cs 592	
1161	126	-	paydirect_ent.dll	.../paymentslogdetails.aspx.cs 597	
998	127	-	paydirect_ent.dll	.../paymentslogdetailsglobal.aspx.cs 142	
999	127	-	paydirect_ent.dll	.../paymentslogdetailsglobal.aspx.cs 148	
1000	127	-	paydirect_ent.dll	.../paymentslogdetailsglobal.aspx.cs 325	
1053	127	-	paydirect_ent.dll	.../paymentslogdetailsglobal.aspx.cs 515	
1054	127	-	paydirect_ent.dll	.../paymentslogdetailsglobal.aspx.cs 518	
1055	127	-	paydirect_ent.dll	.../paymentslogdetailsglobal.aspx.cs 523	
932	128	-	paydirect_ent.dll	.../reports/paymentsreport.aspx.cs 70	
994	128	-	paydirect_ent.dll	.../reports/paymentsreport.aspx.cs 84	
995	128	-	paydirect_ent.dll	.../reports/paymentsreport.aspx.cs 96	
996	128	-	paydirect_ent.dll	.../reports/paymentsreport.aspx.cs 167	
927	129	-	paydirect_ent.dll	.../paymentsreport2.aspx.cs 54	
928	129	-	paydirect_ent.dll	.../paymentsreport2.aspx.cs 68	
929	129	-	paydirect_ent.dll	.../paymentsreport2.aspx.cs 80	
930	129	-	paydirect_ent.dll	.../paymentsreport2.aspx.cs 141	
869	130	-	paydirect_ent.dll	.../paymentsreportbulkprint.aspx.cs 59	
870	130	-	paydirect_ent.dll	.../paymentsreportbulkprint.aspx.cs 63	
924	130	-	paydirect_ent.dll	.../paymentsreportbulkprint.aspx.cs 73	
925	130	-	paydirect_ent.dll	.../paymentsreportbulkprint.aspx.cs 148	
865	131	-	paydirect_ent.dll	.../paymentsreportbypaymentitem.aspx.cs 56	
866	131	-	paydirect_ent.dll	.../paymentsreportbypaymentitem.aspx.cs 111	
867	131	-	paydirect_ent.dll	.../paymentsreportbypaymentitem.aspx.cs 112	
1058	132	-	paydirect_ent.dll	.../paymentsreportbypaymentitemprintable.aspx.cs 40	
1059	132	-	paydirect_ent.dll	.../paymentsreportbypaymentitemprintable.aspx.cs 41	
1060	132	-	paydirect_ent.dll	.../paymentsreportbypaymentitemprintable.aspx.cs 42	
1061	132	-	paydirect_ent.dll	.../paymentsreportbypaymentitemprintable.aspx.cs 43	
1062	132	-	paydirect_ent.dll	.../paymentsreportbypaymentitemprintable.aspx.cs 44	
1063	132	-	paydirect_ent.dll	.../paymentsreportbypaymentitemprintable.aspx.cs 45	
861	133	-	paydirect_ent.dll	.../paymentsreportbythirdparty.aspx.cs	
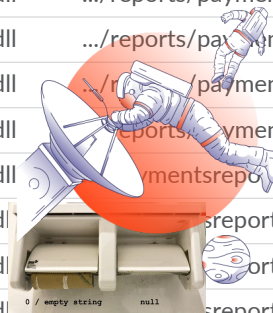
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1002	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 48	
1003	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 49	
1004	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 50	
1005	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 51	
1006	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 52	
1007	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 53	
1008	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 70	
1056	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 71	
1057	134	-	paydirect_ent.dll	.../paymentsreportprintable.aspx.cs 81	
936	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 36	
937	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 37	
938	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 38	
939	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 39	
940	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 40	
941	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 41	
942	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 45	
1001	135	-	paydirect_ent.dll	.../paymentsreportprintable2.aspx.cs 46	
875	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 36	
876	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 37	
877	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 38	
878	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 39	
879	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 40	
933	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 41	
934	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 49	
935	136	-	paydirect_ent.dll	.../paymentsreportprintable3.aspx.cs 50	
952	138	-	paydirect_ent.dll	.../pendingpaymentrequest.aspx.cs 41	
954	138	-	paydirect_ent.dll	.../pendingpaymentrequest.aspx.cs 411	
955	138	-	paydirect_ent.dll	.../pendingpaymentrequest.aspx.cs 423	
352	140	-	paydirect_ent.dll/techquest.framework.dll	.../utilities/portforwarder.cs 110	
1373	144	-	paydirect_ent.dll	.../admin/productinfo.aspx.cs 46	
1427	144	-	paydirect_ent.dll	.../admin/productinfo.aspx.cs 63	
835	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 64	
836	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 179	

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837	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 189	
838	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 196	
888	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 235	
889	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 257	
890	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 268	
891	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 278	
892	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 287	
893	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 296	
894	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 305	
895	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 314	
896	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 326	
949	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 335	
950	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 346	
951	145	-	paydirect_ent.dll	.../productmanagement.aspx.cs 357	
1275	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 149	
1276	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 153	
1337	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 194	
1338	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 195	
1339	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 201	
1340	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 204	
1341	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 211	
1342	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 215	
1343	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 219	
1344	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 232	
1345	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 244	
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1417	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 316	
1418	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 317	
1464	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 318	
1465	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 368	
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1467	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 377	

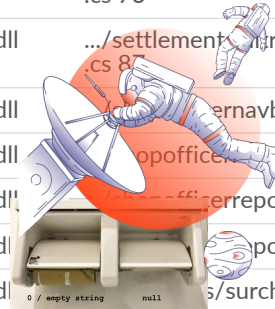| Flaw Id	Module #	Class #	Module	Location	Fix By
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1470	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 401	
1513	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 415	
1514	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 421	
1515	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 422	
1516	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 426	
1517	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 427	
1518	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 445	
1519	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 568	
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634	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 790	
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699	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 879	
700	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 894	
701	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 897	
702	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 901	
765	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 913	
766	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 947	
767	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 950	
1480	147	-	paydirect_ent.dll	jenkins/.../registerbg.aspx.cs 72	
815	148	-	paydirect_ent.dll	.../remittance4rmleadbanksummaryreport.aspx.cs 51	
860	148	-	paydirect_ent.dll	.../remittance4rmleadbanksummaryreport.aspx.cs 90	
872	149	-	paydirect_ent.dll	.../remittance4rmleadbanksummaryreportprintable.aspx.cs 40	
873	149	-	paydirect_ent.dll	.../remittance4rmleadbanksummaryreportprintable.aspx.cs 41	
874	149	-	paydirect_ent.dll	.../remittance4rmleadbanksummaryreportprintable.aspx.cs 46	
812	150	-	paydirect_ent.dll	.../remittancesummaryreport.aspx.cs 50	
813	150	-	paydirect_ent.dll	.../remittancesummaryreport.aspx.cs 59	
814	150	-	paydirect_ent.dll	.../remittancesummaryreport.aspx.cs 81	
820	151	-	paydirect_ent.dll	.../remittancesummaryreportprintable.aspx.cs 53	

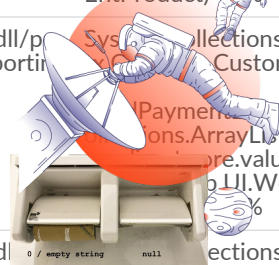| Flaw Id	Module #	Class #	Module	Location	Fix By
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871	151	-	paydirect_ent.dll	.../remittancesummaryreportprintable.aspx.cs 60	
819	155	-	paydirect_ent.dll	.../reportheaderlandscape.ascx.cs 29	
818	156	-	paydirect_ent.dll	.../reportheaderportrait.ascx.cs 32	
817	157	-	paydirect_ent.dll	.../reportheaderportraitglobalsettlement.ascx.cs 31	
809	159	-	paydirect_ent.dll	.../reports/reportsmenu.aspx.cs 69	
810	159	-	paydirect_ent.dll	.../reports/reportsmenu.aspx.cs 647	
811	159	-	paydirect_ent.dll	.../reports/reportsmenu.aspx.cs 649	
757	162	-	paydirect_ent.dll	.../reversalauthorization.aspx.cs 103	
754	170	-	paydirect_ent.dll	.../rtspaymentsreport.aspx.cs 73	
755	170	-	paydirect_ent.dll	.../rtspaymentsreport.aspx.cs 127	
760	171	-	paydirect_ent.dll	.../rtspaymentsreportprintable.aspx.cs 39	
761	171	-	paydirect_ent.dll	.../rtspaymentsreportprintable.aspx.cs 40	
762	171	-	paydirect_ent.dll	.../rtspaymentsreportprintable.aspx.cs 41	
763	171	-	paydirect_ent.dll	.../rtspaymentsreportprintable.aspx.cs 42	
764	171	-	paydirect_ent.dll	.../rtspaymentsreportprintable.aspx.cs 43	
816	171	-	paydirect_ent.dll	.../rtspaymentsreportprintable.aspx.cs 44	
833	177	-	paydirect_ent.dll	.../common/selectsearch.aspx.cs 36	
834	177	-	paydirect_ent.dll	.../common/selectsearch.aspx.cs 60	
1372	178	-	paydirect_ent.dll	.../admin/servicedetail.aspx.cs 44	
1371	179	-	paydirect_ent.dll	.../servicemanagement.aspx.cs 87	
688	182	-	paydirect_ent.dll	.../settlementdetails.aspx.cs 69	
689	182	-	paydirect_ent.dll	.../settlementdetails.aspx.cs 115	
690	182	-	paydirect_ent.dll	.../settlementdetails.aspx.cs 116	
696	183	-	paydirect_ent.dll	.../settlementdetailsprintable.aspx.cs 58	
697	183	-	paydirect_ent.dll	.../settlementdetailsprintable.aspx.cs 60	
758	183	-	paydirect_ent.dll	.../settlementdetailsprintable.aspx.cs 61	
759	183	-	paydirect_ent.dll	.../settlementdetailsprintable.aspx.cs 62	
1455	184	-	paydirect_ent.dll	.../settlementpositions.aspx.cs 49	
1453	185	-	paydirect_ent.dll	.../settlementpositionsbypaymenttype.aspx.cs 63	
1454	185	-	paydirect_ent.dll	.../settlementpositionsbypaymenttype.aspx.cs 78	
695	186	-	paydirect_ent.dll	.../settlementpositionsbypaymenttypeprintable.aspx.cs 49	
1449	187	-	paydirect_ent.dll	.../settlementpositionsforbanks.aspx.cs	

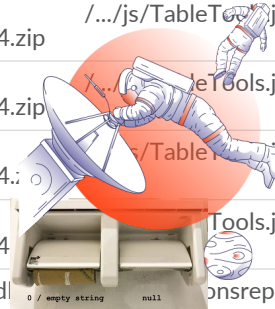| Flaw Id	Module #	Class #	Module	Location	Fix By
				59	
1450	187	-	paydirect_ent.dll	.../settlementpositionsforbanks.aspx.cs 118	
1451	187	-	paydirect_ent.dll	.../settlementpositionsforbanks.aspx.cs 183	
1452	187	-	paydirect_ent.dll	.../settlementpositionsforbanks.aspx.cs 189	
629	188	-	paydirect_ent.dll	.../settlementpositionsforbanksprintable.aspx.cs 61	
691	188	-	paydirect_ent.dll	.../settlementpositionsforbanksprintable.aspx.cs 62	
692	188	-	paydirect_ent.dll	.../settlementpositionsforbanksprintable.aspx.cs 63	
693	188	-	paydirect_ent.dll	.../settlementpositionsforbanksprintable.aspx.cs 64	
694	188	-	paydirect_ent.dll	.../settlementpositionsforbanksprintable.aspx.cs 69	
1401	189	-	paydirect_ent.dll	.../settlementpositionsforleadbank.aspx.c	
1402	189	-	paydirect_ent.dll	.../settlementpositionsforleadbank.aspx.c	
1403	189	-	paydirect_ent.dll	.../settlementpositionsforleadbank.aspx.c	
1448	189	-	paydirect_ent.dll	.../settlementpositionsforleadbank.aspx.cs 150	
1399	190	-	paydirect_ent.dll	.../settlementpositionsgrouped.aspx.cs 59	
1400	190	-	paydirect_ent.dll	.../settlementpositionsgrouped.aspx.cs 69	
626	191	-	paydirect_ent.dll	.../settlementpositionsgroupedprintable.aspx.cs 45	
627	191	-	paydirect_ent.dll	.../settlementpositionsgroupedprintable.aspx.cs 47	
628	191	-	paydirect_ent.dll	.../settlementpositionsgroupedprintable.aspx.cs 48	
625	192	-	paydirect_ent.dll	.../settlementpositionsprintable.aspx.cs 49	
1396	193	-	paydirect_ent.dll	.../settlementreportbypaymentitem.aspx.cs 117	
1397	193	-	paydirect_ent.dll	.../settlementreportbypaymentitem.aspx.cs 118	
1509	194	-	paydirect_ent.dll	.../settlementreportbypaymentitemprintable.aspx.cs 56	
1510	194	-	paydirect_ent.dll	.../settlementreportbypaymentitemprintable.aspx.cs 57	
1511	194	-	paydirect_ent.dll	.../settlementreportbypaymentitemprintable.aspx.cs 58	
1512	194	-	paydirect_ent.dll	.../settlementreportbypaymentitemprintable.aspx.cs 59	
623	194	-	paydirect_ent.dll	.../settlementreportbypaymentitemprinta	

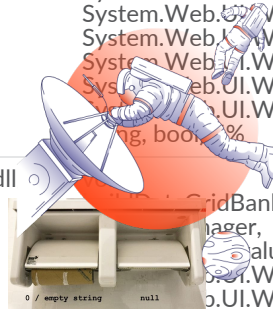| Flaw Id	Module #	Class #	Module	Location	Fix By
				ble.aspx.cs 60	
624	194	-	paydirect_ent.dll	.../settlementreportbypaymentitemprintable.aspx.cs 61	
1505	196	-	paydirect_ent.dll	.../settlementsplitprintable.aspx.cs 50	
1506	196	-	paydirect_ent.dll	.../settlementsplitprintable.aspx.cs 52	
1507	196	-	paydirect_ent.dll	.../settlementsplitprintable.aspx.cs 53	
1508	196	-	paydirect_ent.dll	.../settlementsplitprintable.aspx.cs 54	
1395	197	-	paydirect_ent.dll	.../settlementsplitreport.aspx.cs 77	
1327	198	-	paydirect_ent.dll	.../settlementsplitreportbythirdparty.aspx.cs 57	
1328	198	-	paydirect_ent.dll	.../settlementsplitreportbythirdparty.aspx.cs 66	
1329	198	-	paydirect_ent.dll	.../settlementsplitreportbythirdparty.aspx.cs 73	
1394	198	-	paydirect_ent.dll	.../settlementsplitreportbythirdparty.aspx.cs 87	
832	199	-	paydirect_ent.dll	.../...ernavbar.aspx.cs 44	
1324	200	-	paydirect_ent.dll	.../...opofficerreportsmenu.aspx.cs 51	
1325	200	-	paydirect_ent.dll	.../...backofficerreportsmenu.aspx.cs 390	
1326	200	-	paydirect_ent.dll	.../...reportsmenu.aspx.cs 392	
1273	201	-	paydirect_ent.dll	.../payments/surchargeinfo.aspx.cs 22	
1274	201	-	paydirect_ent.dll	.../payments/surchargeinfo.aspx.cs 23	
456	-	90	paydirect_ent.dll/paydirect.ui.dll	System.Collections.ArrayList buildDataGridBankTransactionsLog(bool, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (3 more parameters)) 89%	
482	-	86	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.ArrayList buildDataGridBankTransactionsLog(bool, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (4 more parameters)) 90%	
303	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.ArrayList BuildDataGridNIBSSSettlementSummaryByPaymentType(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid,	

Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (4 more parameters)) 9%	
295	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadDto> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, EntProduct) 38%	
296	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadDto> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, EntProduct) 4.%	
297	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadDto> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, ...)	
298	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadDto> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, EntProduct) 43%	
299	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadDto> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, EntProduct) 46%	
300	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadDto> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, EntProduct) 77%	
301	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadDto> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, EntProduct) 80%	
302	-	85	paydirect_ent.dll/paydirect_ent.reportin	System.Collections.Generic.List<Paydirectx.Core.Dto.Custom.PaymentDownloadD	

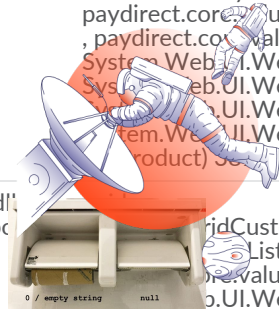| Flaw Id	Module #	Class #	Module	Location	Fix By
			g.dll	to> BuildPaymentDownloadDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, EntProduct) 83%	
319	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	System.Data.DataTable BuildDataGridNIBSSSettlementSummaryByPaymentTypeForUI(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (4 more parameters)) 11%	
239	206	-	JS files within PaydirectENT 4.zip	/.../js/TableTools.js 635	
240	206	-	JS files within PaydirectENT 4.zip	/.../TableTools.js 769	
241	206	-	JS files within PaydirectENT 4.z	/.../Table...js 897	
242	206	-	JS files within PaydirectENT 4	...Tools.js 936	
1323	215	-	paydirect_ent.dll	...onsreport.aspx.cs 83	
1503	216	-	paydirect_ent.dll	.../transactionsreportprintable.aspx.cs 43	
1504	216	-	paydirect_ent.dll	.../transactionsreportprintable.aspx.cs 44	
831	217	-	paydirect_ent.dll	.../treasuryofficernavbar.aspx.cs 42	
1320	218	-	paydirect_ent.dll	.../treasuryofficerreportsmenu.aspx.cs 47	
1321	218	-	paydirect_ent.dll	.../treasuryofficerreportsmenu.aspx.cs 378	
1322	218	-	paydirect_ent.dll	.../treasuryofficerreportsmenu.aspx.cs 380	
785	220	-	paydirect_ent.dll	.../uploadcustomerinfo.aspx.cs 55	
780	221	-	paydirect_ent.dll	.../common/uploadedinfo.aspx.cs 41	
781	221	-	paydirect_ent.dll	.../common/uploadedinfo.aspx.cs 42	
782	221	-	paydirect_ent.dll	.../common/uploadedinfo.aspx.cs 51	
783	221	-	paydirect_ent.dll	.../common/uploadedinfo.aspx.cs 76	
784	221	-	paydirect_ent.dll	.../common/uploadedinfo.aspx.cs 80	
1370	223	-	paydirect_ent.dll	.../admin/usermanagement.aspx.cs 80	
1103	-	87	paydirect_ent.dll/paydirect.firs.dll	valueobject.TaxType loadFIRSPaymentPage(paydirect.core.PAYDirectCoreManager, PAYDirectFIRSManager, System.Collections.ArrayList, valueobject.TaxType, System.Web.UI.WebControls.DropDownList, System.Web.UI.WebControls.DropDown	

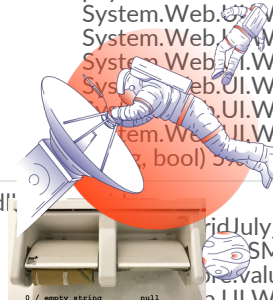| Flaw Id	Module #	Class #	Module	Location	Fix By
				List, System.Web.UI.WebControls.DropDown List, System.Web.UI.WebControls.Label, bool) 18%	
1104	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridBankPaymentsLog(PAYDir ectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 4%	
1105	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridBankPaymentsLog(PAYDir ectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 5%	
1151	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridBankPaymentsLog(PAYDir ectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 6%	
1152	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridBankPaymentsLog(PAYDir ectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 95%	
1153	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridBankPaymentsLog(PAYDir ectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 97%	
1154	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridBankPaymentsLog(PAYDir ectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label,	

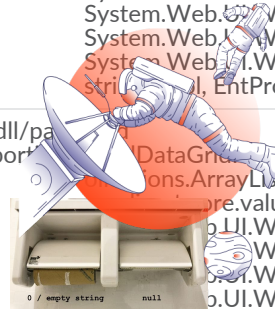| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 99%	
339	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridBankPaymentsLog(ReportsManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 4%	
340	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridBankPaymentsLog(ReportsManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 5%	
341	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridBankPaymentsLog(ReportsManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 6%	
252	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridBankPaymentsLog(ReportsManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 94%	
253	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridBankPaymentsLog(ReportsManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 97%	
254	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridBankPaymentsLog(ReportsManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid,	

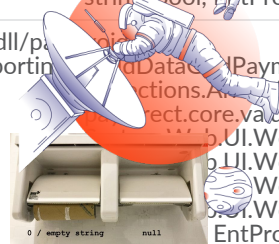| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 99%	
59	-	85	paydirect_ent.dll/pa ydirect_ent.reportin g.dll	void buildDataGridBankPaymentsLog(Reports Manager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, (1 more parameter)) 37%	
25	-	85	paydirect_ent.dll/pa ydirect_ent.reportin g.dll	void buildDataGridChequePayments(System.C ollections.ArrayList, paydirect.core.valueobject.SecurityProfile , paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, Product) 36%	
26	-	85	paydirect_ent.dll/pa ydirect_ent.reportin g.dll	void buildDataGridCustomerDetails(System.C ollections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, EntProduct) 33%	
27	-	85	paydirect_ent.dll/pa ydirect_ent.reportin g.dll	void buildDataGridCustomerDetails(System.C ollections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, EntProduct) 36%	
28	-	85	paydirect_ent.dll/pa ydirect_ent.reportin g.dll	void buildDataGridCustomerDetails(System.C ollections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, EntProduct) 38%	
29	-	85	paydirect_ent.dll/pa ydirect_ent.reportin g.dll	void buildDataGridCustomerDetails(System.C ollections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, EntProduct) 43%	
30	-	85	paydirect_ent.dll/pa ydirect_ent.reportin g.dll	void buildDataGridCustomerDetails(System.C ollections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, EntProduct) 48%	
484	-	86	paydirect_ent.dll/pa ydirect_ent.reportin	void buildDataGridIkedcTransactionsReport(S	

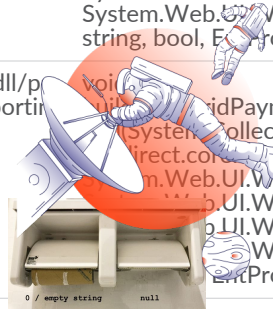| Flaw Id	Module #	Class #	Module	Location	Fix By
			g.dll	ystem.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, string) 99%	
1155	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridJuly_7_9_BankPaymentsLog(PAYDirectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 4%	
1156	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridJuly_7_9_BankPaymentsLog(PAYDirectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 5%	
1157	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridJuly_7_9_BankPaymentsLog(PAYDirectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 5%	
1158	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridJuly_7_9_BankPaymentsLog(PAYDirectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 95%	
1159	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridJuly_7_9_BankPaymentsLog(PAYDirectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 97%	
1160	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridJuly_7_9_BankPaymentsLog(PAYDirectFIRSManager, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid,	

Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 99%	
31	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentException(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 44%	
32	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentException(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 46%	
33	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	buildDataGridPaymentsByPaymentItemSummary(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 37%	
34	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsByPaymentItemSummary(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 41%	
35	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsByThirdPartySummary(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, int, bool, EntProduct) 37%	
36	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsByThirdPartySummary(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, int, bool, EntProduct) 41%	
1203	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridPaymentsDetails(PAYDirectFIRSManager, System.Collections.ArrayList,	

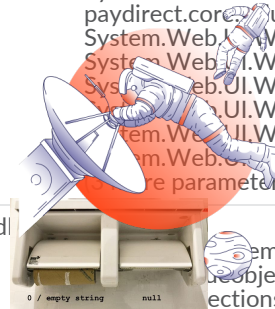| Flaw Id	Module #	Class #	Module	Location	Fix By
				paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool) 39%	
37	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 28%	
41	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 29%	
40	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 30%	
269	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 32%	
270	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 34%	
271	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 77%	
272	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj,	

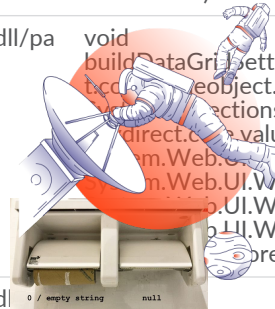| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 78%	
273	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 80%	
274	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails2(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 32%	
275	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails2(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 33%	
276	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails2(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 35%	
277	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails2(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 37%	
278	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetails2(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 73%	
255	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetailsForDownload(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid,	

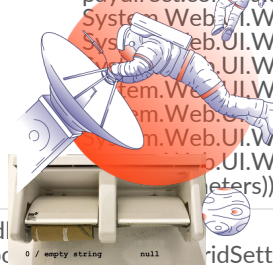| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 31%	
256	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetailsForDownload(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 33%	
257	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetailsForDownload(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 34%	
258	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsDetailsForDownload(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, EntProduct) 78%	
43	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsEnquiryDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 38%	
285	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsEnquiryDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 39%	
44	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsEnquiryDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 41%	
286	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridPaymentsEnquiryDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label,	

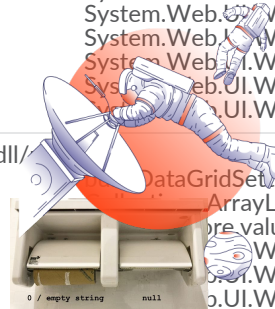| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, bool, EntProduct) 45%	
1205	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridRemittanceDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (5 more parameters)) 34%	
97	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridRemittanceSummary(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, bool, (3 more parameters)) 7%	
98	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridRemittanceSummary(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, bool, (3 more parameters)) 8%	
99	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridRemittanceSummary(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, bool, (3 more parameters)) 22%	
100	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridRemittanceSummary(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, bool, (3 more parameters)) 97%	
101	-	88	paydirect_ent.dll/pa	void	

Flaw Id	Module #	Class #	Module	Location	Fix By
			ydirect.firs.dll	buildDataGridRemittanceSummary(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, bool, (3 more parameters)) 99%	
47	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridServiceDetails(System.Collections.ArrayList, paydirect.core.valueobject.SecurityProfile, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, EntProduct) 34%	
1204	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridSettlementDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, bool, (more parameter)) 31%	
287	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	buildDataGridSettlementDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (6 more parameters)) 30%	
288	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (6 more parameters)) 31%	
289	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label,	

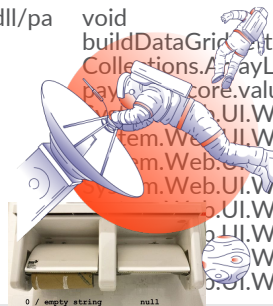| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (6 more parameters)) 32%	
290	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (6 more parameters)) 69%	
291	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (6 more parameters)) 70%	
292	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementDetails(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (6 more parameters)) 71%	
85	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 7%	
86	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label,	

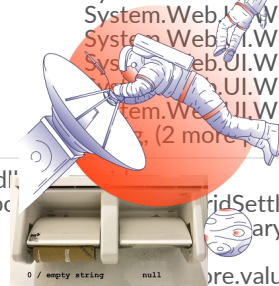| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label) 9%	
87	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 12%	
82	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 15%	
83	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 18%	
84	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 21%	
1102	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 35%	
92	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj,	

Tel.+1.339.674.2500 Fax.+1.339.674.2502 URL:http://www.veracode.com

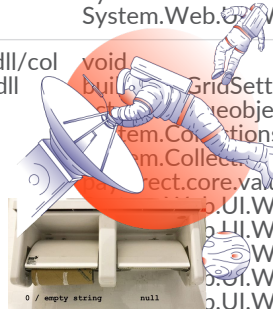| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 66%	
93	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 69%	
94	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 73%	
88	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 81%	
89	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 84%	
90	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label,	

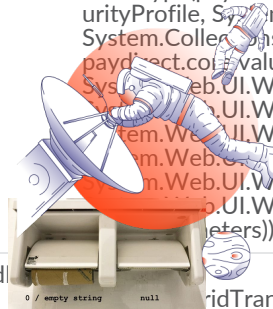| Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 88%	
91	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementDetails(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 95%	
259	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementPaymentsByPaymentItemSummary(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (2 more parameters)) 36%	
260	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementPaymentsByPaymentItemSummary(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, string, (2 more parameters)) 38%	
104	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridSettlementPositions(paydirect.core.valueobject.SecurityProfile, PAYDirectFIRSManager, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (3 more parameters)) 11%	
66	-	88	paydirect_ent.dll/paydirect.firs.dll	void buildDataGridSettlementPositions(paydirect.core.valueobject.SecurityProfile, PAYDirectFIRSManager, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (3 more parameters)) 98%	

Flaw Id	Module #	Class #	Module	Location	Fix By
80	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementPositions(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 11%	
81	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementPositions(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 98%	
95	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridSettlementPositions(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (2 more parameters)) 9%	
96	-	5	paydirect_ent.dll/college.reporting.dll	void buildDataGridSettlementPositions(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (2 more parameters)) 92%	
293	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementPositions(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (7 more parameters)) 6%	
68	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementPositions(System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj,	

Flaw Id	Module #	Class #	Module	Location	Fix By
				System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 8%	
79	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridSettlementPositions(System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 98%	
294	-	85	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridSettlementPositionsByPaymentType(paydirect.core.valueobject.SecurityProfile, System.Collections.ArrayList, System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, (3 parameters)) 7%	
455	-	90	paydirect_ent.dll/paydirect.ui.dll	void buildDataGridTransactionsReport(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, string) 99%	
483	-	86	paydirect_ent.dll/paydirect_ent.reporting.dll	void buildDataGridTransactionsReport(System.Collections.ArrayList, paydirect.core.valueobject.ReportObj, System.Web.UI.WebControls.DataGrid, System.Web.UI.WebControls.Label, string) 99%	
243	-	91	paydirect_ent.dll/rjs.web.webcontrol.popcalendar.net.2010.dll	void Render(System.Web.UI.HtmlTextWriter) 17%	
102	-	88	paydirect_ent.dll/paydirect.firs.dll	void setupLeadBankRemmitanceDetailsPageControls(paydirect.core.valueobject.ReportObj, paydirect.core.valueobject.BanksSettlement, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 61%	
103	-	88	paydirect_ent.dll/paydirect.firs.dll	void setupLeadBankRemmitanceDetailsPageControls(paydirect.core.valueobject.ReportObj,	

Flaw Id	Module #	Class #	Module	Location	Fix By
				paydirect.core.valueobject.BanksSettlement, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label, System.Web.UI.WebControls.Label) 98%	

Cryptographic Issues(58 flaws)

Associated Flaws by CWE ID:

Improper Certificate Validation (CWE ID 295)(1 flaw)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
349	227	-	paydirect_ent.dll/techquest.framework.dll	...requesthelper.cs 35	
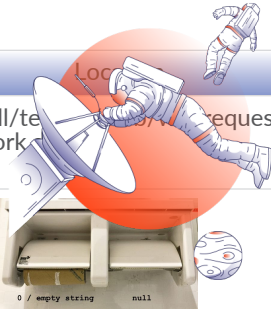
Insufficient Entropy (CWE ID 331)(8 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1079	62	-	paydirect_ent.dll	.../floatcardsetup_insert.aspx.cs 179	
353	72	-	paydirect_ent.dll/techquest.framework.dll	.../utilities/helperfunctions.cs 1320	
350	139	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../pinpad.cs 189	
65	-	8	paydirect_ent.dll/offline.paydirect.dll	string generateRandomPIN(string) 98%	
69	-	8	paydirect_ent.dll/offline.paydirect.dll	string generateRandomPIN(string) 98%	
64	-	8	paydirect_ent.dll/offline.paydirect.dll	string generateRandomPIN(string) 98%	
63	-	7	paydirect_ent.dll/paydirect.transaction.dll/mybase.controls.pinpad.dll	System.Collections.ArrayList GeneratePinPadNumbers(int, bool) 68%	
233	-	2	paydirect_ent.dll/cce_v2.dll	System.Collections.ArrayList GeneratePinPadNumbers(int, bool) 69%	

Use of Hard-coded Cryptographic Key (CWE ID 321)(1 flaw)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
354	85	-	paydirect_ent.dll/techquest.framework.dll	.../security/maccbcalgorithm.cs 29	

Use of RSA Algorithm without OAEP (CWE ID 780)(3 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
316	40	-	paydirect_ent.dll/paydirectx.core.dll	.../dangote/dangotesecurityutil.cs 30	
317	40	-	paydirect_ent.dll/paydirectx.core.dll	.../dangote/dangotesecurityutil.cs 56	
318	40	-	paydirect_ent.dll/paydirectx.core.dll	.../dangote/dangotesecurityutil.cs 80	
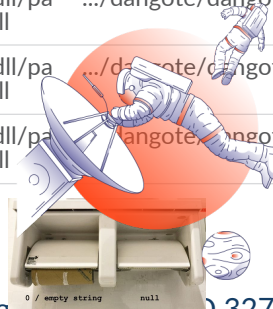
Use of a Broken or Risky Cryptographic Algorithm (CWE ID 327)(45 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
4	-	4	paydirect_ent.dll/cce_v2.dll	byte[] DesCalculator(string, string, bool) 0%	
5	-	4	paydirect_ent.dll/cce_v2.dll	byte[] DesCalculator(string, string, bool) 6%	
6	-	4	paydirect_ent.dll/cce_v2.dll	byte[] DesCalculator(string, string, bool) 24%	
1	-	4	paydirect_ent.dll/cce_v2.dll	byte[] TripleDesCalculator(string, string, bool) 0%	
2	-	4	paydirect_ent.dll/cce_v2.dll	byte[] TripleDesCalculator(string, string, bool) 6%	
3	-	4	paydirect_ent.dll/cce_v2.dll	byte[] TripleDesCalculator(string, string, bool) 24%	
360	29	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../crypto.cs 322	
361	29	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../crypto.cs 353	
362	29	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../crypto.cs 380	

Flaw Id	Module #	Class #	Module	Location	Fix By
363	29	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../crypto.cs 735	
364	29	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../crypto.cs 779	
355	30	-	paydirect_ent.dll/techquest.framework.dll	.../security/cryptoservices.cs 419	
356	30	-	paydirect_ent.dll/techquest.framework.dll	.../security/cryptoservices.cs 513	
357	30	-	paydirect_ent.dll/techquest.framework.dll	.../security/cryptoservices.cs 918	
358	30	-	paydirect_ent.dll/techquest.framework.dll	.../security/cryptoservices.cs 984	
359	30	-	paydirect_ent.dll/techquest.framework.dll	.../security/cryptoservices.cs 1013	
281	43	-	paydirect_ent.dll/paydirect_ent.core.	encryptionalgorithmfactory.cs 31	
282	43	-	paydirect_ent.dll/paydirect_ent.core	encryptionalgorithmfactory.cs 41	
283	43	-	paydirect_ent.dll/paydirect_ent.core.dll	encryptionalgorithmfactory.cs 49	
268	54	-	paydirect_ent.dll/paydirect_ent.core.dll	.../encryptionalgorithmfactory.cs 70	
279	54	-	paydirect_ent.dll/paydirect_ent.core.dll	.../encryptionalgorithmfactory.cs 81	
280	54	-	paydirect_ent.dll/paydirect_ent.core.dll	.../encryptionalgorithmfactory.cs 93	
367	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 59	
368	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 60	
369	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 64	
370	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 86	
371	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 87	
372	55	-	paydirect_ent.dll/techquest.framework.dll	isw_projects/.../encryptor.cs 91	
321	71	-	paydirect_ent.dll/paydirectx.core.dll	.../hashalgorithmfactory.cs 37	

Flaw Id	Module #	Class #	Module	Location	Fix By
365	88	-	paydirect_ent.dll/techquest.framework.dll	.../util/md5passwordhandler.cs 49	
309	174	-	paydirect_ent.dll/paydirectx.core.dll	jenkins/.../util/securityutil.cs 154	
310	174	-	paydirect_ent.dll/paydirectx.core.dll	jenkins/.../util/securityutil.cs 159	
261	173	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../utils/securityutil.cs 160	
311	174	-	paydirect_ent.dll/paydirectx.core.dll	jenkins/.../util/securityutil.cs 161	
262	173	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../utils/securityutil.cs 165	
263	173	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../utils/securityutil.cs 167	
312	174	-	paydirect_ent.dll/paydirectx.core.dll	jenkins/.../util/securityutil.cs 188	
313	174	-	paydirect_ent.dll/paydirectx.core.dll	jenkins/.../util/securityutil.cs 193	
264	173	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../utils/securityutil.cs 194	
314	174	-	paydirect_ent.dll/paydirectx.core.dll	jenkins/.../util/securityutil.cs 195	
265	173	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../utils/securityutil.cs 199	
266	173	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../utils/securityutil.cs 201	
9	-	3	paydirect_ent.dll/cce_v2.dll	string getPasswordDigest(string) 97%	
22	-	1	paydirect_ent.dll/apps.services.dll	string Hash(string) 48%	
55	-	10	paydirect_ent.dll/paydirect.core.dll	string Hash(string) 53%	
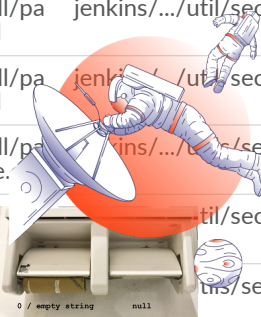
➡ Information Leakage(3 flaws)

Associated Flaws by CWE ID:

➡ Server-Side Request Forgery (SSRF) (CWE ID 918)(3 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1267	81	-	paydirect_ent.dll	.../ipgbillertransactions.cs 110	
1266	153	-	paydirect_ent.dll	.../util/remotefilereader.cs 32	
62	-	89	paydirect_ent.dll/paydirect.transaction.d	string formatPINData(string) 67%	

Flaw Id	Module #	Class #	Module	Location	Fix By
			ll		

→ Insufficient Input Validation(77 flaws)

Associated Flaws by CWE ID:

→ Improperly Controlled Modification of Dynamically-Determined Object Attributes (CWE ID 915)(27 flaws)

Instances found via Static Scan

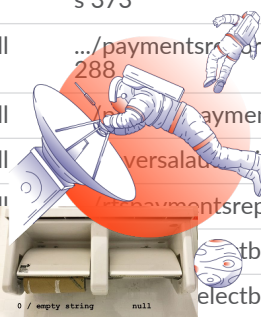| Flaw Id	Module #	Class #	Module	Location	Fix By
778	13	-	paydirect_ent.dll	.../budgetscontroller.cs 254	
708	32	-	paydirect_ent.dll	.../customerco....oller.cs 153	
710	32	-	paydirect_ent.dll	.../c...merc...ntroller.cs 245	
704	59	-	paydirect_ent.dll	...j....controller.cs 72	
706	59	-	paydirect_ent.dll	...calyearsco....oller.cs 129	
1366	63	-	paydirect_ent.dll	...controller.cs 84	
1368	63	-	paydirect_ent.dll	...oller.cs 123	
1362	78	-	paydirect_ent.dll	...troller.cs 99	
1364	78	-	paydirect_ent.dll	.../injectcontroller.cs 168	
1311	90	-	paydirect_ent.dll	.../nibssaccountcontroller.cs 37	
1305	96	-	paydirect_ent.dll	.../notificationtemplatecontroller.cs 83	
1307	96	-	paydirect_ent.dll	.../notificationtemplatecontroller.cs 140	
640	143	-	paydirect_ent.dll	.../productdumenttemplatecontroller.cs 50	
1301	164	-	paydirect_ent.dll	jenkins/.../rolecontroller.cs 77	
1303	164	-	paydirect_ent.dll	jenkins/.../rolecontroller.cs 108	
1299	165	-	paydirect_ent.dll	.../rolefunctioncontroller.cs 127	
1295	167	-	paydirect_ent.dll	.../rolegroupcontroller.cs 64	
1297	167	-	paydirect_ent.dll	.../rolegroupcontroller.cs 93	
1255	180	-	paydirect_ent.dll	.../servicemethodcontroller.cs 69	
1293	180	-	paydirect_ent.dll	.../servicemethodcontroller.cs 108	
1250	204	-	paydirect_ent.dll	.../systemsettingcontroller.cs 77	
1252	204	-	paydirect_ent.dll	.../systemsettingcontroller.cs 120	
1246	207	-	paydirect_ent.dll	.../terminalownercontroller.cs 72	
1248	207	-	paydirect_ent.dll	.../terminalownercontroller.cs 131	
1242	208	-	paydirect_ent.dll	.../terminalownermethodcallauthorisation controller.cs 159	
1244	208	-	paydirect_ent.dll	.../terminalownermethodcallauthorisation	

Flaw Id	Module #	Class #	Module	Location	Fix By
				controller.cs 182	
1239	222	-	paydirect_ent.dll	jenkins/.../usercontroller.cs 139	

➡️ **URL Redirection to Untrusted Site ('Open Redirect') (CWE ID 601)(50 flaws)**

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1426	1	-	paydirect_ent.dll	.../additionaldatacapture.aspx.cs 248	
1425	2	-	paydirect_ent.dll	.../payments/adjustments.aspx.cs 174	
1460	4	-	paydirect_ent.dll	.../bankcachedtransactionslog.aspx.cs 169	
1458	5	-	paydirect_ent.dll	.../bankpayme...log.aspx.cs 205	
1456	7	-	paydirect_ent.dll	.../b...transa...ionslog.aspx.cs 229	
1409	14	-	paydirect_ent.dll	...paymentsdetailsreport.aspx.c	
1530	18	-	paydirect_ent.dll	...quesmonitoring.aspx.cs 123	
1528	19	-	paydirect_ent.dll	...monitoringvanilla.aspx.cs 286	
636	24	-	paydirect_ent.dll	...gistration.aspx.cs 58	
1479	26	-	paydirect_ent.dll	jenkins/.../create.aspx.cs 372	
1408	33	-	paydirect_ent.dll	.../customerenquiry.aspx.cs 109	
1082	42	-	paydirect_ent.dll	jenkins/.../common/decider.aspx.cs 95	
1478	51	-	paydirect_ent.dll	jenkins/.../edit.aspx.cs 387	
1404	67	-	paydirect_ent.dll	.../globalbankcachedtransactionslog.aspx.cs 199	
1336	68	-	paydirect_ent.dll	.../globalreporthome.aspx.cs 41	
1428	89	-	paydirect_ent.dll	.../admin/new_update_user.aspx.cs 228	
1429	89	-	paydirect_ent.dll	.../admin/new_update_user.aspx.cs 318	
1335	94	-	paydirect_ent.dll	.../nibsssettlementsummarybypaymenttype.aspx.cs 322	
267	99	-	paydirect_ent.dll/paydirect_ent.core.dll	.../paydirectauthenticationutil.cs 42	
1333	102	-	paydirect_ent.dll	.../paymentcategorysummaryreport.aspx.cs 248	
1474	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 839	
1351	107	-	paydirect_ent.dll	.../paymentinfo_dstv.aspx.cs 367	
1348	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 827	
1228	110	-	paydirect_ent.dll	.../paymentitemselection.aspx.cs 74	
1277	110	-	paydirect_ent.dll	.../paymentitemselection.aspx.cs 86	
1278	110	-	paydirect_ent.dll	.../paymentitemselection.aspx.cs 124	

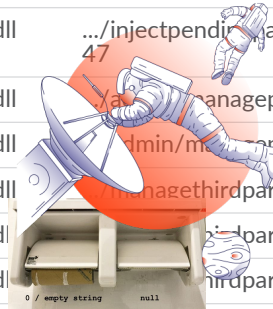| Flaw Id	Module #	Class #	Module	Location	Fix By
1268	114	-	paydirect_ent.dll	.../paymentsauthorization.aspx.cs 622	
1212	115	-	paydirect_ent.dll	.../paymentsauthorizationglobal.aspx.cs 395	
1210	119	-	paydirect_ent.dll	.../paymentsbybranches.aspx.cs 351	
1207	122	-	paydirect_ent.dll	.../paymentsdownloadreport.aspx.cs 306	
1165	123	-	paydirect_ent.dll	.../paymentsenquiry.aspx.cs 131	
1163	125	-	paydirect_ent.dll	.../paymentsexceptionreport.aspx.cs 208	
1106	127	-	paydirect_ent.dll	.../paymentslogdetailsglobal.aspx.cs 698	
997	128	-	paydirect_ent.dll	.../reports/paymentsreport.aspx.cs 457	
931	129	-	paydirect_ent.dll	.../paymentsreport2.aspx.cs 311	
926	130	-	paydirect_ent.dll	.../paymentsreportbulkprint.aspx.cs 239	
868	131	-	paydirect_ent.dll	.../paymentsreportbypaymentitem.aspx.cs 373	
864	133	-	paydirect_ent.dll	.../paymentsreportbythirdparty.aspx.cs 288	
953	138	-	paydirect_ent.dll	.../paymentrequest.aspx.cs 173	
808	162	-	paydirect_ent.dll	.../versalauthorization.aspx.cs 253	
756	170	-	paydirect_ent.dll	.../paymentsreport.aspx.cs 289	
752	175	-	paydirect_ent.dll	.../selectbank.aspx.cs 55	
753	175	-	paydirect_ent.dll	.../selectbank.aspx.cs 81	
750	176	-	paydirect_ent.dll	.../reports/selectbranch.aspx.cs 87	
751	176	-	paydirect_ent.dll	.../reports/selectbranch.aspx.cs 112	
1398	193	-	paydirect_ent.dll	.../settlementreportbypaymentitem.aspx.cs 269	
351	211	-	paydirect_ent.dll/techquest.framework.dll	.../tqexceptionhandlerattribute.cs 71	
1264	225	-	paydirect_ent.dll	.../vdinterface.aspx.cs 91	
1265	225	-	paydirect_ent.dll	.../vdinterface.aspx.cs 230	
1263	226	-	paydirect_ent.dll	.../vdinterfaceglobal.aspx.cs 135	

Low (317 flaws)

→ Information Leakage(92 flaws)

Associated Flaws by CWE ID:

Generation of Error Message Containing Sensitive Information (CWE ID 209)(38 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1393	9	-	paydirect_ent.dll	.../bgcustomervalidation.aspx.cs 1354	
1502	16	-	paydirect_ent.dll	.../common/capturecustomer.aspx.cs 539	
1500	34	-	paydirect_ent.dll	.../customerinfoerrors.aspx.cs 49	
1501	34	-	paydirect_ent.dll	.../customerinfoerrors.aspx.cs 68	
1437	47	-	paydirect_ent.dll	.../dropdowndatepicker.ascx.cs 78	
1499	57	-	paydirect_ent.dll	.../common/fileerrorinfo.aspx.cs 63	
1498	61	-	paydirect_ent.dll	.../common/floatcardsetup.aspx.cs 149	
1497	62	-	paydirect_ent.dll	.../floatcardsetup_insert.aspx.cs 170	
1496	65	-	paydirect_ent.dll	.../common/generateqrcode.aspx.cs 125	
1495	80	-	paydirect_ent.dll	.../injectpendingpaymentrequest.aspx.cs 47	
851	86	-	paydirect_ent.dll	.../managepayitem.aspx.cs 139	
852	86	-	paydirect_ent.dll	.../admin/managepayitem.aspx.cs 179	
848	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 158	
849	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 178	
850	87	-	paydirect_ent.dll	.../managethirdparty.aspx.cs 197	
250	95	-	paydirect_ent.dll/techquest.framework.dll	.../notificationhelper.cs 162	
251	95	-	paydirect_ent.dll/techquest.framework.dll	.../notificationhelper.cs 162	
1313	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 149	
1314	101	-	paydirect_ent.dll	.../paymentapprovaldetail.aspx.cs 175	
1262	106	-	paydirect_ent.dll	.../payments/paymentinfo.aspx.cs 832	
1260	107	-	paydirect_ent.dll	.../paymentinfo_dstv.aspx.cs 361	
1261	107	-	paydirect_ent.dll	.../paymentinfo_dstv.aspx.cs 626	
1259	108	-	paydirect_ent.dll	.../paymentinfo_mtnpostpaid.aspx.cs 820	
1149	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1031	
1150	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1089	
1201	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1640	
1202	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1659	
1257	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 2517	
1258	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 2543	
1146	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 191	
1392	147	-	paydirect_ent.dll	jenkins/.../registerbg.aspx.cs 147	
898	210	-	paydirect_ent.dll	.../throttlerreport.aspx.cs 55	

Flaw Id	Module #	Class #	Module	Location	Fix By
1444	220	-	paydirect_ent.dll	.../uploadcustomerinfo.aspx.cs 65	
1445	220	-	paydirect_ent.dll	.../uploadcustomerinfo.aspx.cs 197	
1446	220	-	paydirect_ent.dll	.../uploadcustomerinfo.aspx.cs 203	
1447	220	-	paydirect_ent.dll	.../uploadcustomerinfo.aspx.cs 216	
1442	221	-	paydirect_ent.dll	.../common/uploadedinfo.aspx.cs 65	
1443	221	-	paydirect_ent.dll	.../common/uploadedinfo.aspx.cs 111	

Insertion of Sensitive Information Into Sent Data (CWE ID 201)(54 flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
839	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 35	
840	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 35	
841	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 92	
842	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 92	
843	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 92	
844	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 166	
845	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 166	
897	10	-	paydirect_ent.dll	jenkins/.../util/billerqrcode.cs 166	
322	36	-	paydirect_ent.dll/paydirect_ent.core.dll	.../common/customerprocessor.cs 48	
323	46	-	paydirect_ent.dll/paydirectx.core.dll	.../defaultpaymentnotificationclient.cs 57	
788	81	-	paydirect_ent.dll	.../ipgbillertransactions.cs 49	
789	81	-	paydirect_ent.dll	.../ipgbillertransactions.cs 49	
790	81	-	paydirect_ent.dll	.../ipgbillertransactions.cs 110	
791	81	-	paydirect_ent.dll	.../ipgbillertransactions.cs 110	
786	98	-	paydirect_ent.dll	jenkins/.../util/passporttoken.cs 40	
787	98	-	paydirect_ent.dll	jenkins/.../util/passporttoken.cs 40	
1312	103	-	paydirect_ent.dll	.../paymentconfirm.aspx.cs 190	
1200	112	-	paydirect_ent.dll	.../paymentreceipt.aspx.cs 1522	
1147	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 3841	
1148	124	-	paydirect_ent.dll	.../payments/paymentsetup.aspx.cs 3861	
974	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 316	
1029	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 384	
1030	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 568	
1031	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 582	

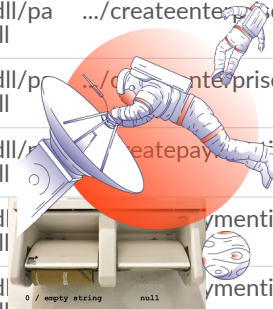| Flaw Id	Module #	Class #	Module	Location	Fix By
1032	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 588	
1085	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 709	
1086	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 744	
1087	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 775	
1088	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 790	
1089	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 796	
1145	146	-	paydirect_ent.dll	.../payments/receiptprint.aspx.cs 879	
899	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 157	
900	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 159	
901	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 207	
902	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 506	
903	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 509	
956	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 527	
957	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 530	
958	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 533	
959	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 546	
960	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 549	
961	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 552	
962	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 555	
963	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 567	
964	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 570	
965	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 573	
966	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 576	
967	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 579	
968	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 591	
969	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 594	
970	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 597	
971	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 600	
972	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 603	
973	154	-	paydirect_ent.dll	.../reportfeesbychannel.aspx.cs 606	
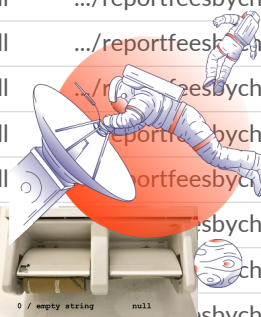
➡ Insufficient Input Validation(225 flaws)

Associated Flaws by CWE ID:

→ **ASP.NET Misconfiguration: Improper Model Validation (CWE ID 1174)(225 flaws)**

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
1380	12	-	paydirect_ent.dll	jenkins/.../model/budgetmodel.cs 47	
1381	12	-	paydirect_ent.dll	jenkins/.../model/budgetmodel.cs 49	
1382	12	-	paydirect_ent.dll	jenkins/.../model/budgetmodel.cs 50	
1441	13	-	paydirect_ent.dll	.../budgetscontroller.cs 254	
1095	27	-	paydirect_ent.dll/paydirectx.core.dll	.../createenterpriseproductrequest.cs 29	
1096	27	-	paydirect_ent.dll/paydirectx.core.dll	.../createenterpriseproductrequest.cs 38	
1097	27	-	paydirect_ent.dll/paydirectx.core.dll	.../createenterpriseproductrequest.cs 47	
1098	27	-	paydirect_ent.dll/paydirectx.core.dll	.../createenterpriseproductrequest.cs 56	
1099	27	-	paydirect_ent.dll/paydirectx.core.dll	.../createenterpriseproductrequest.cs 68	
1091	28	-	paydirect_ent.dll/paydirectx.core.dll	.../createpaymentitemrequest.cs 23	
1092	28	-	paydirect_ent.dll/paydirectx.core.dll	.../createpaymentitemrequest.cs 26	
1093	28	-	paydirect_ent.dll/paydirectx.core.dll	.../createpaymentitemrequest.cs 29	
1094	28	-	paydirect_ent.dll/paydirectx.core.dll	.../createpaymentitemrequest.cs 32	
1319	35	-	paydirect_ent.dll	jenkins/.../model/customermodel.cs 17	
1374	35	-	paydirect_ent.dll	jenkins/.../model/customermodel.cs 18	
1375	35	-	paydirect_ent.dll	jenkins/.../model/customermodel.cs 19	
1376	35	-	paydirect_ent.dll	jenkins/.../model/customermodel.cs 20	
1377	35	-	paydirect_ent.dll	jenkins/.../model/customermodel.cs 25	
1378	35	-	paydirect_ent.dll	jenkins/.../model/customermodel.cs 29	
1379	35	-	paydirect_ent.dll	jenkins/.../model/customermodel.cs 31	
1317	58	-	paydirect_ent.dll	jenkins/.../model/fiscalyear.cs 30	
1318	58	-	paydirect_ent.dll	jenkins/.../model/fiscalyear.cs 40	
1440	59	-	paydirect_ent.dll	.../fiscalyearscontroller.cs 129	
846	63	-	paydirect_ent.dll	.../functioncontroller.cs 84	
847	63	-	paydirect_ent.dll	.../functioncontroller.cs 123	
739	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 19	
740	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 22	
741	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 25	
742	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 31	
743	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 34	

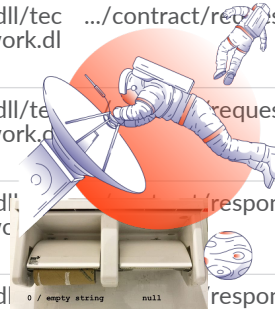| Flaw Id	Module #	Class #	Module	Location	Fix By
744	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 49	
745	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 57	
746	64	-	paydirect_ent.dll	jenkins/.../functionmodel.cs 66	
806	78	-	paydirect_ent.dll	.../injectcontroller.cs 40	
807	78	-	paydirect_ent.dll	.../injectcontroller.cs 168	
684	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 29	
685	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 42	
686	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 73	
687	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 76	
731	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 80	
732	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 83	
733	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 86	
734	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 89	
735	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 92	
736	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 94	
737	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 96	
738	79	-	paydirect_ent.dll	.../models/injectpaymentmodel.cs 100	
905	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 41	
906	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 48	
907	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 55	
908	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 62	
909	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 69	
910	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 90	
911	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 104	
912	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 111	
913	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 118	
914	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 125	
915	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 132	
916	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 139	
917	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 146	
918	83	-	paydirect_ent.dll/pa	.../contract/logpaymentrequest.cs 153	
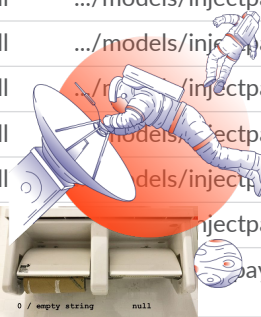
Flaw Id	Module #	Class #	Module	Location	Fix By
			ydirectx.core.dll		
919	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 160	
920	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 167	
921	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 174	
922	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 181	
923	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 188	
975	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 195	
976	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 202	
977	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 209	
978	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 233	
979	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 237	
980	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 250	
981	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 257	
982	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 264	
983	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 271	
984	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 278	
985	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 291	
986	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 298	
987	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 305	
988	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 340	
989	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 346	
990	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 353	
991	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 360	
992	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 374	
993	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 381	
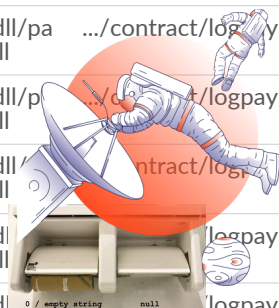
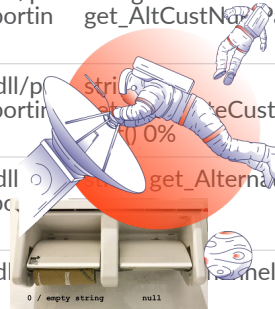| Flaw Id	Module #	Class #	Module	Location	Fix By
1033	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 388	
1034	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 395	
1035	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 402	
1036	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 409	
1037	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 413	
1038	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 420	
1039	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 427	
1040	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 434	
1041	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 441	
1042	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 448	
1043	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 455	
1044	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 469	
1045	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 481	
1046	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 502	
1047	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 560	
1048	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 564	
1049	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 568	
1050	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 576	
1051	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 593	
1052	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 597	
1090	83	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentrequest.cs 606	
859	84	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentresponse.cs 28	
904	84	-	paydirect_ent.dll/paydirectx.core.dll	.../contract/logpaymentresponse.cs 32	
805	90	-	paydirect_ent.dll	.../nibssaccountcontroller.cs 37	
680	91	-	paydirect_ent.dll	.../models/nibssaccountmodel.cs 12	
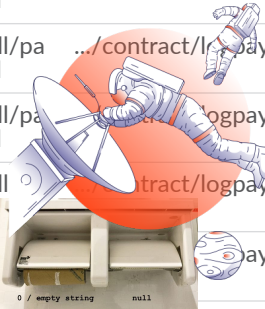
Flaw Id	Module #	Class #	Module	Location	Fix By
681	91	-	paydirect_ent.dll	.../models/nibssaccountmodel.cs 13	
682	91	-	paydirect_ent.dll	.../models/nibssaccountmodel.cs 15	
683	91	-	paydirect_ent.dll	.../models/nibssaccountmodel.cs 16	
803	96	-	paydirect_ent.dll	.../notificationtemplatecontroller.cs 83	
804	96	-	paydirect_ent.dll	.../notificationtemplatecontroller.cs 140	
678	97	-	paydirect_ent.dll	.../notificationtemplatemodel.cs 28	
679	97	-	paydirect_ent.dll	.../notificationtemplatemodel.cs 30	
1316	142	-	paydirect_ent.dll	.../productdocumenttemplatemodel.cs 30	
1439	143	-	paydirect_ent.dll	.../productdumenttemplatecontroller.cs 50	
856	160	-	paydirect_ent.dll/techquest.framework.dll	.../contract/requestbaseobject.cs 18	
857	160	-	paydirect_ent.dll/techquest.framework.dll	.../contract/requestbaseobject.cs 21	
858	160	-	paydirect_ent.dll/techquest.framework.dll	.../contract/requestbaseobject.cs 45	
853	161	-	paydirect_ent.dll/techquest.framework.dll	.../responsebaseobject.cs 19	
854	161	-	paydirect_ent.dll/techquest.framework.dll	.../responsebaseobject.cs 32	
855	161	-	paydirect_ent.dll/techquest.framework.dll	.../contract/responsebaseobject.cs 56	
1388	163	-	paydirect_ent.dll	.../reversepaymentmodel.cs 4	
1389	163	-	paydirect_ent.dll	.../reversepaymentmodel.cs 5	
1390	163	-	paydirect_ent.dll	.../reversepaymentmodel.cs 11	
1391	163	-	paydirect_ent.dll	.../reversepaymentmodel.cs 12	
801	164	-	paydirect_ent.dll	jenkins/.../rolecontroller.cs 77	
802	164	-	paydirect_ent.dll	jenkins/.../rolecontroller.cs 108	
800	165	-	paydirect_ent.dll	.../rolefunctioncontroller.cs 127	
676	166	-	paydirect_ent.dll	.../models/rolefunctionmodel.cs 19	
677	166	-	paydirect_ent.dll	.../models/rolefunctionmodel.cs 29	
798	167	-	paydirect_ent.dll	.../rolegroupcontroller.cs 64	
799	167	-	paydirect_ent.dll	.../rolegroupcontroller.cs 93	
673	168	-	paydirect_ent.dll	jenkins/.../rolegroupmodel.cs 19	
674	168	-	paydirect_ent.dll	jenkins/.../rolegroupmodel.cs 22	
675	168	-	paydirect_ent.dll	jenkins/.../rolegroupmodel.cs 28	
1557	169	-	paydirect_ent.dll	jenkins/.../models/rolemodel.cs 19	
668	169	-	paydirect_ent.dll	jenkins/.../models/rolemodel.cs 22	

Flaw Id	Module #	Class #	Module	Location	Fix By
669	169	-	paydirect_ent.dll	jenkins/.../models/rolemodel.cs 28	
670	169	-	paydirect_ent.dll	jenkins/.../models/rolemodel.cs 37	
671	169	-	paydirect_ent.dll	jenkins/.../models/rolemodel.cs 45	
672	169	-	paydirect_ent.dll	jenkins/.../models/rolemodel.cs 54	
796	180	-	paydirect_ent.dll	.../servicemethodcontroller.cs 69	
797	180	-	paydirect_ent.dll	.../servicemethodcontroller.cs 108	
1555	181	-	paydirect_ent.dll	.../models/servicemethodmodel.cs 19	
1556	181	-	paydirect_ent.dll	.../models/servicemethodmodel.cs 31	
1438	195	-	paydirect_ent.dll	.../settlementscontroller.cs 32	
722	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_AdditionalPaymentInfoRegex() 0%	
658	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_AltCustNumPaymentComment() 0%	
718	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_AlternateCustomerNumberMaskFor() 0%	
659	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_AlternateUserIdentifier() 0%	
1532	-	11	paydirect_ent.dll/paydirect.core.dll	string get_channelsReportURL() 0%	
1533	-	11	paydirect_ent.dll/paydirect.core.dll	string get_chequesMonitoringURL() 0%	
657	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_CompositeCustomerNumberMask() 0%	
726	-	9	paydirect_ent.dll/paydirect.core.dll	string get_connectionString() 0%	
720	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_CreditNoteMaskPlural() 0%	
719	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_CreditNoteMaskSingular() 0%	
660	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_CustNumPaymentComment() 0%	
661	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_CustomerNumberMask() 0%	
717	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_CustomerNumberMaskFormat() 0%	
662	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_DefaultThirdPartyCode() 0%	
653	-	12	paydirect_ent.dll/paydirect.core.dll	string get_internetProduct() 0%	

Flaw Id	Module #	Class #	Module	Location	Fix By
714	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_LegacyReportLink() 0%	
663	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_MiscData() 0%	
728	-	9	paydirect_ent.dll/paydirect.core.dll	string get_miscData() 0%	
664	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_MiscValue() 0%	
729	-	9	paydirect_ent.dll/paydirect.core.dll	string get_miscValue() 0%	
716	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_PaymentItemCategoryPluralName() 0%	
715	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_PaymentItemCategorySingularName() 0%	
665	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_PaymentItemMaskPlural() 0%	
666	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_PaymentItemMaskSingular()	
1534	-	11	paydirect_ent.dll/paydirect.core.dll	string get_paymentItemsCollectiveName() 0%	
654	-	12	paydirect_ent.dll/paydirect.core.dll	string get_pinBlock() 0%	
1535	-	11	paydirect_ent.dll/paydirect.core.dll	string get_productCode() 0%	
1536	-	11	paydirect_ent.dll/paydirect.core.dll	string get_productDescription() 0%	
647	-	11	paydirect_ent.dll/paydirect.core.dll	string get_productImage() 0%	
648	-	11	paydirect_ent.dll/paydirect.core.dll	string get_productName() 0%	
649	-	11	paydirect_ent.dll/paydirect.core.dll	string get_productShortCode() 0%	
650	-	11	paydirect_ent.dll/paydirect.core.dll	string get_productsManagementMenuURL() 0%	
667	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_QtyFieldMask() 0%	
725	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_QueueGroup() 0%	
721	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_ReceiptMessage() 0%	
651	-	11	paydirect_ent.dll/paydirect.core.dll	string get_reportsURL() 0%	
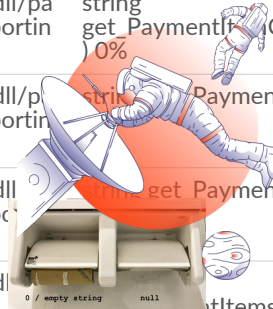
Flaw Id	Module #	Class #	Module	Location	Fix By
723	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_RouteId() 0%	
655	-	12	paydirect_ent.dll/paydirect.core.dll	string get_sessionID() 0%	
711	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_ThirdPartyMaskPlural() 0%	
712	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_ThirdPartyMaskSingular() 0%	
724	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_TSACode() 0%	
713	-	84	paydirect_ent.dll/paydirect_ent.reporting.dll	string get_UniqueItemMask() 0%	
656	-	12	paydirect_ent.dll/paydirect.core.dll	string get_userProductsString() 0%	
652	-	11	paydirect_ent.dll/paydirect.core.dll	string get_wdInterfaceURL() 0%	
730	-	9	paydirect_ent.dll/paydirect.core.dll	string get_xmlString() 0%	
794	204	-	paydirect_ent.dll	.../settingcontroller.cs 77	
795	204	-	paydirect_ent.dll	.../settingcontroller.cs 120	
1549	205	-	paydirect_ent.dll	.../models/systemsettingmodel.cs 16	
1550	205	-	paydirect_ent.dll	.../models/systemsettingmodel.cs 17	
1551	205	-	paydirect_ent.dll	.../models/systemsettingmodel.cs 18	
1552	205	-	paydirect_ent.dll	.../models/systemsettingmodel.cs 19	
1553	205	-	paydirect_ent.dll	.../models/systemsettingmodel.cs 20	
1554	205	-	paydirect_ent.dll	.../models/systemsettingmodel.cs 26	
792	207	-	paydirect_ent.dll	.../terminalownercontroller.cs 72	
793	207	-	paydirect_ent.dll	.../terminalownercontroller.cs 131	
748	208	-	paydirect_ent.dll	.../terminalownermethodcallauthorisation controller.cs 159	
749	208	-	paydirect_ent.dll	.../terminalownermethodcallauthorisation controller.cs 182	
1545	209	-	paydirect_ent.dll	.../models/terminalownermodel.cs 21	
1546	209	-	paydirect_ent.dll	.../models/terminalownermodel.cs 25	
1547	209	-	paydirect_ent.dll	.../models/terminalownermodel.cs 29	
1548	209	-	paydirect_ent.dll	.../models/terminalownermodel.cs 54	
1383	214	-	paydirect_ent.dll	.../transactionsearchparameters.cs 7	
1384	214	-	paydirect_ent.dll	.../transactionsearchparameters.cs 10	
1385	214	-	paydirect_ent.dll	.../transactionsearchparameters.cs 11	
1386	214	-	paydirect_ent.dll	.../transactionsearchparameters.cs 12	
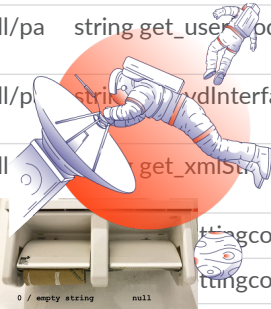
Flaw Id	Module #	Class #	Module	Location	Fix By
1387	214	-	paydirect_ent.dll	.../transactionsearchparameters.cs 13	
747	222	-	paydirect_ent.dll	jenkins/.../usercontroller.cs 139	
1537	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 17	
1538	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 20	
1539	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 23	
1540	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 26	
1541	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 31	
1542	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 62	
1543	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 84	
1544	224	-	paydirect_ent.dll	jenkins/.../models/usermodel.cs 93	

Info (13 flaws)

➡ Code Quality(13 flaws)

Associated Flaws by CWE ID:

➡ Improper Resource Shutdown or Release (C   flaws)

Instances found via Static Scan

Flaw Id	Module #	Class #	Module	Location	Fix By
72	-	6	paydirect_ent.dll/colleges.paydirect.dll	CustomerDataUploadResponse SendRequest() 31%	
74	-	6	paydirect_ent.dll/colleges.paydirect.dll	CustomerDataUploadResponse SendRequest() 50%	
329	46	-	paydirect_ent.dll/paydirectx.core.dll	.../defaultpaymentnotificationclient.cs 60	
328	76	-	paydirect_ent.dll/paydirectx.core.dll	jenkins/.../util/httpwebutil.cs 65	
325	77	-	paydirect_ent.dll/paydirect_ent.core.dll	jenkins/.../utils/httpwebutil.cs 70	
324	152	-	paydirect_ent.dll/paydirect_ent.core.dll	.../remotecustomervalidationservice.cs 82	
1101	172	-	paydirect_ent.dll	.../scriptcompressorcontroller.cs 29	
71	-	1	paydirect_ent.dll/apps.services.dll	string Decrypt(string, string) 3%	
76	-	10	paydirect_ent.dll/paydirect.core.dll	string Decrypt(string, string) 3%	
70	-	1	paydirect_ent.dll/apps.services.dll	string Encrypt(string, string) 66%	
78	-	10	paydirect_ent.dll/paydirect.core.dll	string Encrypt(string, string) 69%	
348	212	-	paydirect_ent.dll/techquest.framework.dl	.../web/tqhttpresponse.cs 31	

Flaw Id	Module #	Class #	Module	Location	Fix By
			I		
1100	220	-	paydirect_ent.dll	.../uploadcustomerinfo.aspx.cs 135	
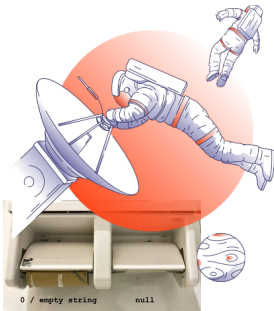
Appendix B: Referenced Source Files

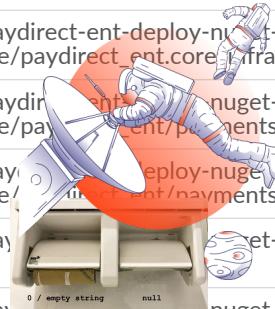| Id	Filename	Path
1	additionaldatacapture.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
2	adjustments.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments
3	administratorreportsmenu.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
4	bankcachedtransactionslog.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
5	bankpaymentslog.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
6	bankpaymentslogprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
7	banktransactionslog.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
8	banktransactionslogprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
9	bgcustomervalidation.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/dangote/
10	billerqrcode.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/util/
11	budget.js	/PaydirectENT.3.0.../scripts/app...
12	budgetmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/model/
13	budgetscontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/...llers/
14	buildbankpaymentsdetailsreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
15	capturecreditnotes.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments
16	capturecustomer.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
17	chequepaymentreportcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
18	chequesmonitoring.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
19	chequesmonitoringvanilla.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
20	commonnavbar.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
21	commonnavbar.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
22	commonthirdpartynavbar.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
23	commonuploadnavbar.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
24	confirmregistration.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/dangote/
25	constants.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/valueobjects/
26	create.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/additionaldata/
27	createenterpriseproductrequest.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/serviceframework/contract/
28	createpaymentitemrequest.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/serviceframework/contract/

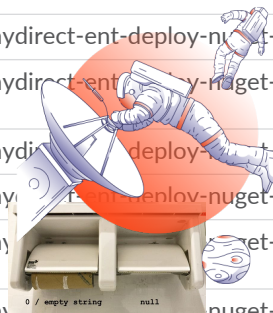| Id	Filename	Path
29	crypto.cs	isw_projects/tqframework.net/techquest.framework/security/
30	cryptoservices.cs	isw_projects/tqframework.net/techquest.framework/security/
31	customaiicocapture.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
32	customercontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
33	customerenquiry.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
34	customerinfoerrors.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
35	customermodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/model/
36	customerprocessor.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/webservice/common/
37	customersearch.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
38	dangotebankguaranteereportdetails.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/dangote/
39	dangotebgreceipt.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/dangote/
40	dangotesecurityutil.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.serviceframework/remoteserviceproxy/dangote/
41	dataformfieldbase.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/infrastructures/dynamiccontrol/webform/
42	decider.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
43	decryptionalgorithmfactory.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/infrastructures/security/
44	defaultconfigurationsynchandler.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/tasks/merchantconfigurationupload/
45	defaultcustomerinformationretrievalservice.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/services/impl/
46	defaultpaymentnotificationclient.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/services/impl/
47	dropdowndatepicker.ascx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controls/
48	duplicateposting.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
49	duplicatepostingsreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
50	duplicatepostingsreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
51	edit.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/additionaldata/
52	editpayitem.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
53	editthirdparty.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
54	encryptionalgorithmfactory.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/infrastructures/security/
55	encryptor.cs	isw_projects/tqframework.net/techquest.framework/cce/util/crypto/
56	exceptionlogger.cs	isw_projects/tqframework.net/techquest.framework/applicationmanagement/
57	fileerrorinfo.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
58	fiscalyear.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/model/
59	fiscalyearscontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
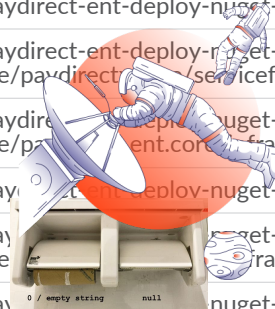
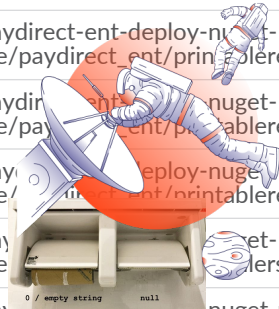| Id	Filename	Path
60	flexiblesettlementcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
61	floatcardsetup.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
62	floatcardsetup_insert.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
63	functioncontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
64	functionmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
65	generateqrcode.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
66	getcustomer.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/webservice/methodcalls/
67	globalbankcachedtransactionslog.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
68	globalreporthome.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
69	globalsettlementprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
70	globalsettlementreportbybankprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
71	hashalgorithmfactory.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/...core/infrastructures/security/
72	helperfunctions.cs	isw_projects/tqf...quest.framework/utilities/
73	hexconverter.cs	isw_projects/tqf...est.framework/cce/util/
74	highavailabilitymanager.cs	isw_projects/tqframework.net/techquest.framework/availability/
75	homecontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
76	httpwebutil.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/util/
77	httpwebutil.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/infrastructures/utils/
78	injectcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
79	injectpaymentmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
80	injectpendingpaymentrequest.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
81	ipgbillertransactions.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/util/
82	knockout.debug.js	/PaydirectENT.3.0.286/scripts/
83	logpaymentrequest.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/serviceframework/contract/
84	logpaymentresponse.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/serviceframework/contract/
85	maccbcalgorithm.cs	isw_projects/tqframework.net/techquest.framework/security/
86	managepayitem.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
87	managethirdparty.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
88	md5passwordhandler.cs	isw_projects/tqframework.net/techquest.framework/cce/util/
89	new_update_user.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/

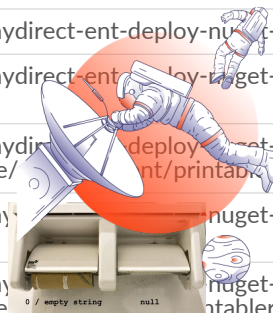| Id	Filename	Path
90	nibssaccountcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
91	nibssaccountmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
92	nibsspaymentcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
93	NibssPaymentPopup.js	/PaydirectENT.3.0.286/scripts/
94	nibsssettlementsummarybypaymenttype.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
95	notificationhelper.cs	isw_projects/tqframework.net/techquest.framework/utilities/
96	notificationtemplatecontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
97	notificationtemplatemodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
98	passporttoken.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/util/
99	paydirectauthenticationutil.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core.infrastructures/security/
100	paymentapprovalconfirm.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
101	paymentapprovaldetail.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
102	paymentcategorysummaryreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
103	paymentconfirm.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
104	paymentexceptionreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
105	paymentgrid.js	/PaydirectENT.3.0.286/scripts/apps/
106	paymentinfo.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
107	paymentinfo_dstv.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
108	paymentinfo_mtnpostpaid.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
109	paymentitemselect.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
110	paymentitemselection.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
111	paymentnotificationreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
112	paymentreceipt.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
113	paymentreversalreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
114	paymentsauthorization.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
115	paymentsauthorizationglobal.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
116	paymentsauthorizationreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/

| Id	Filename	Path
117	paymentsbybanks.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
118	paymentsbybanksprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
119	paymentsbybranches.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
120	paymentsbybranchesprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
121	paymentsbythirdpartyprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
122	paymentsdownloadreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
123	paymentsenquiry.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
124	paymentsetup.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
125	paymentsexceptionreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
126	paymentslogdetails.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
127	paymentslogdetailsglobal.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
128	paymentsreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
129	paymentsreport2.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
130	paymentsreportbulkprint.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
131	paymentsreportbypaymentitem.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
132	paymentsreportbypaymentitemprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
133	paymentsreportbythirdparty.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
134	paymentsreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
135	paymentsreportprintable2.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
136	paymentsreportprintable3.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
137	paymentsreversalreportcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
138	pendingpaymentrequest.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
139	pinpad.cs	isw_projects/tqframework.net/techquest.framework/web/mvc/htmlhelpers/
140	portforwarder.cs	isw_projects/tqframework.net/techquest.framework/utilities/
141	postilionfacade.cs	isw_projects/tqframework.net/techquest.framework/cce/
142	productdocumenttemplatemodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/model/
143	productdumenttemplatecontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
144	productinfo.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
145	productmanagement.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/

Id	Filename	Path
146	receiptprint.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
147	registerbg.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/dangote/
148	remittance4rmleadbanksummaryreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
149	remittance4rmleadbanksummaryreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
150	remittancesummaryreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
151	remittancesummaryreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
152	remotecustomervalidationservice.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/integrations/impl/
153	remotefilereader.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/util/
154	reportfeesbychannel.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
155	reportheaderlandscape.ascx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
156	reportheaderportrait.ascx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
157	reportheaderportraitglobalsettlement.ascx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
158	reportscontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
159	reportsmenu.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
160	requestbaseobject.cs	isw_projects/tqframework.net/techquest.framework/serviceframework/contract/
161	responsebaseobject.cs	isw_projects/tqframework.net/techquest.framework/serviceframework/contract/
162	reversalauthorization.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
163	reversepaymentmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/model/arbitration/
164	rolecontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
165	rolefunctioncontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
166	rolefunctionmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
167	rolegroupcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
168	rolegroupmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
169	rolemodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
170	rtspaymentsreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
171	rtspaymentsreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
172	scriptcompressorcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
173	securityutil.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent.core/infrastructures/utils/

| Id	Filename	Path
174	securityutil.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirectx.core/util/
175	selectbank.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
176	selectbranch.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
177	selectsearch.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
178	servicedetail.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
179	servicemanagement.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
180	servicemethodcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
181	servicemethodmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
182	settlementdetails.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
183	settlementdetailsprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
184	settlementpositions.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
185	settlementpositionsbypaymenttype.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
186	settlementpositionsbypaymenttypeprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
187	settlementpositionsforbanks.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
188	settlementpositionsforbanksprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
189	settlementpositionsforleadbank.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
190	settlementpositionsgrouped.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
191	settlementpositionsgroupedprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
192	settlementpositionsprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
193	settlementreportbypaymentitem.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
194	settlementreportbypaymentitemprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
195	settlementscontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/v1/
196	settlementsplitprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
197	settlementsplitreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
198	settlementsplitreportbythirdparty.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
199	shopofficernavbar.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
200	shopofficerreportsmenu.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
201	surchargeinfo.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/payments/
202	swagger.js	/PaydirectENT.3.0.286/api-doc/lib/

| Id	Filename	Path
203	systemmessagecontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
204	systemsettingcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
205	systemsettingmodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
206	TableTools.js	/PaydirectENT.3.0.286/Content/TableTools-2.1.4/js/
207	terminalownercontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
208	terminalownermethodcallauthorisationcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
209	terminalownermodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
210	throttlerreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
211	tqexceptionhandlerattribute.cs	isw_projects/tqframework.net/techquest.framework/web/mvc/filters/
212	tqhttpresponse.cs	isw_projects/tqframework.net/techquest.framework/web/
213	tqlogger.cs	isw_projects/tqframework.net/techquest.framework/applicationmanagement/logging/
214	transactionsearchparameters.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/model/arbitration/
215	transactionsreport.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
216	transactionsreportprintable.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/printablereports/
217	treasuryofficernavbar.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
218	treasuryofficerreportsmenu.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/reports/
219	unclearedpaymentsreportcontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/controllers/
220	uploadcustomerinfo.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
221	uploadedinfo.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/common/
222	usercontroller.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/controllers/
223	usermanagement.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/admin/
224	usermodel.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/areas/tqframework/models/
225	vdinterface.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/
226	vdinterfaceglobal.aspx.cs	jenkins/jobs/paydirect-ent-deploy-nuget-new/workspace/paydirect_ent/
227	webrequesthelper.cs	isw_projects/tqframework.net/techquest.framework/web/
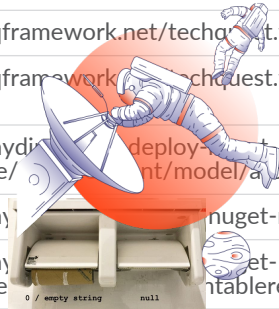
Appendix C: Referenced Classpaths

Id	Path
1	apps_services_dll.apps.services.Crypto
2	cce_v2_dll.Interswitch.Core.Controls.Pinpad
3	cce_v2_dll.interswitch.cce.util.MD5PasswordHandler
4	cce_v2_dll.interswitch.cce.util.crypto.Encryptor
5	college_reporting_dll.college.reporting.services.ReportsService
6	colleges_paydirect_dll.EnterpriseProducts.Paydirect.BusinessLogic.BusinessFacade.CustomerDataUploadRequest
7	mybase_controls_pinpad_dll.mybase.controls.pinpad.pinpad
8	offline_paydirect_dll.offline.paydirect.services.OfflineService
9	paydirect_core_dll.paydirect.core.iValueObject.DataObject
10	paydirect_core_dll.paydirect.core.util.Crypto
11	paydirect_core_dll.paydirect.core.valueobject.Product
12	paydirect_core_dll.paydirect.core.valueobject.SecurityProfile
13	paydirect_ent_1_dll.ResettlePaymentModel
14	paydirect_ent_1_dll.ReversePaymentModel
15	paydirect_ent_1_dll.Techquest.Web.Areas.TQ....Controllers.ScriptCompressorController
16	paydirect_ent_1_dll.common_FloatCardSetup
17	paydirect_ent_1_dll.common_FloatCardSetup
18	paydirect_ent_1_dll.paydirect_ent.Controllers.ProductDumentTemplateController
19	paydirect_ent_1_dll.paydirect_ent.Controllers.v1.PaymentLogsController
20	paydirect_ent_1_dll.paydirect_ent.Model.ProductDocumentTemplate
21	paydirect_ent_1_dll.paydirect_ent.SurchargeInfo
22	paydirect_ent_1_dll.paydirect_ent.VDInterface
23	paydirect_ent_1_dll.paydirect_ent.VDInterfaceGlobal
24	paydirect_ent_1_dll.paydirect_ent.admin.ChequesMonitoring
25	paydirect_ent_1_dll.paydirect_ent.admin.ChequesMonitoringVanilla
26	paydirect_ent_1_dll.paydirect_ent.admin.ManagePayItem
27	paydirect_ent_1_dll.paydirect_ent.admin.ManageThirdParty
28	paydirect_ent_1_dll.paydirect_ent.admin.New_Update_User
29	paydirect_ent_1_dll.paydirect_ent.api.models.TransactionSearchParameters
30	paydirect_ent_1_dll.paydirect_ent.common.CaptureCustomer
31	paydirect_ent_1_dll.paydirect_ent.common.Decider
32	paydirect_ent_1_dll.paydirect_ent.common.FileErrorInfo
33	paydirect_ent_1_dll.paydirect_ent.common.GenerateQRCode
34	paydirect_ent_1_dll.paydirect_ent.common.PendingPaymentRequest
35	paydirect_ent_1_dll.paydirect_ent.common.UploadCustomerInfo
36	paydirect_ent_1_dll.paydirect_ent.common.UploadCustomerUploadInfosErrors
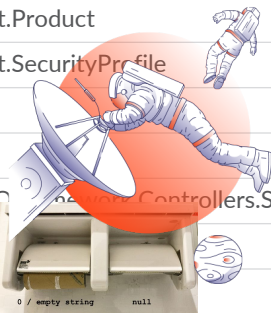
Id	Path
37	paydirect_ent_1_dll.paydirect_ent.common.UploadedInfo
38	paydirect_ent_1_dll.paydirect_ent.dangote.bgcustomervalidation
39	paydirect_ent_1_dll.paydirect_ent.dangote.registerbg
40	paydirect_ent_1_dll.paydirect_ent.payments.PaymentConfirm
41	paydirect_ent_1_dll.paydirect_ent.payments.PaymentInfo
42	paydirect_ent_1_dll.paydirect_ent.payments.PaymentInfo_Dstv
43	paydirect_ent_1_dll.paydirect_ent.payments.PaymentInfo_MtnPostpaid
44	paydirect_ent_1_dll.paydirect_ent.payments.PaymentReceipt
45	paydirect_ent_1_dll.paydirect_ent.payments.PaymentSetup
46	paydirect_ent_1_dll.paydirect_ent.payments.ReceiptPrint
47	paydirect_ent_1_dll.paydirect_ent.printablereports.GlobalSettlementPrintable
48	paydirect_ent_1_dll.paydirect_ent.printablereports.GlobalSettlementReportByBankPrintable
49	paydirect_ent_1_dll.paydirect_ent.printablereports.PaymentsAuthorizationReportPrintable
50	paydirect_ent_1_dll.paydirect_ent.printablereports.ReportHeaderLandscape
51	paydirect_ent_1_dll.paydirect_ent.printablereports.ReportHeaderPortrait
52	paydirect_ent_1_dll.paydirect_ent.printablereports.ReportHeaderPortraitGlobalSettlement
53	paydirect_ent_1_dll.paydirect_ent.reports.BankCachedTransactionsLog
54	paydirect_ent_1_dll.paydirect_ent.reports.Ba...
55	paydirect_ent_1_dll.paydirect_ent.reports.Ba...
56	paydirect_ent_1_dll.paydirect_ent.reports.BuildBankPaymentsDetailsReport
57	paydirect_ent_1_dll.paydirect_ent.reports.CustomerEnquiry
58	paydirect_ent_1_dll.paydirect_ent.reports.GlobalBankCachedTransactionsLog
59	paydirect_ent_1_dll.paydirect_ent.reports.GlobalReportHome
60	paydirect_ent_1_dll.paydirect_ent.reports.NIBSSSettlementSummaryByPaymentType
61	paydirect_ent_1_dll.paydirect_ent.reports.PaymentCategorySummaryReport
62	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsAuthorization
63	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsAuthorizationGlobal
64	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsByBranches
65	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsDownloadReport
66	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsEnquiry
67	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsExceptionReport
68	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsLogDetailsGlobal
69	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsReport
70	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsReport2
71	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsReportBulkPrint
72	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsReportByPaymentItem
73	paydirect_ent_1_dll.paydirect_ent.reports.PaymentsReportByThirdParty
74	paydirect_ent_1_dll.paydirect_ent.reports.ReversalAuthorization
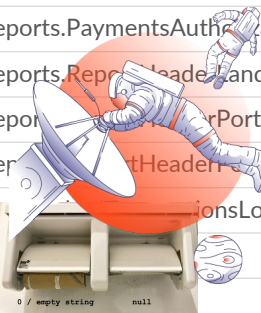
Id	Path
75	paydirect_ent_1_dll.paydirect_ent.reports.RtsPaymentsReport
76	paydirect_ent_1_dll.paydirect_ent.reports.SelectBank
77	paydirect_ent_1_dll.paydirect_ent.reports.SelectBranch
78	paydirect_ent_1_dll.paydirect_ent.reports.SettlementPositionsGrouped
79	paydirect_ent_1_dll.paydirect_ent.reports.SettlementReportByPaymentItem
80	paydirect_ent_1_dll.paydirect_ent.util.IPGBillerTransactions._3CGetTransactions_3Ed__2
81	paydirect_ent_1_dll.paydirect_ent.webapp.payments.PaymentItemSelection
82	paydirect_ent_1_dll.paydirect_ent.webapp.reports.ThrottlerReport
83	paydirect_ent_1_dll.payments_PaymentApprovalDetail
84	paydirect_ent_reporting_dll.paydirect_ent.lib.EntProduct
85	paydirect_ent_reporting_dll.paydirect_ent.lib.ReportsService
86	paydirect_ent_reporting_dll.paydirect_ent.lib.services.UIServices
87	paydirect_firs_dll.paydirect.firs.services.FIRSUIManager
88	paydirect_firs_dll.paydirect.firs.services.FIRSUIReportsService
89	paydirect_transaction_dll.paydirect.transaction.s ice
90	paydirect_ui_dll.paydirect.ui.services.UIReport
91	rjs_web_webcontrol_popcalendar_net_2010 Control.PopCalendar