



CUSTOMER GUIDE TO TECHNICAL SUPPORT AND MAINTENANCE

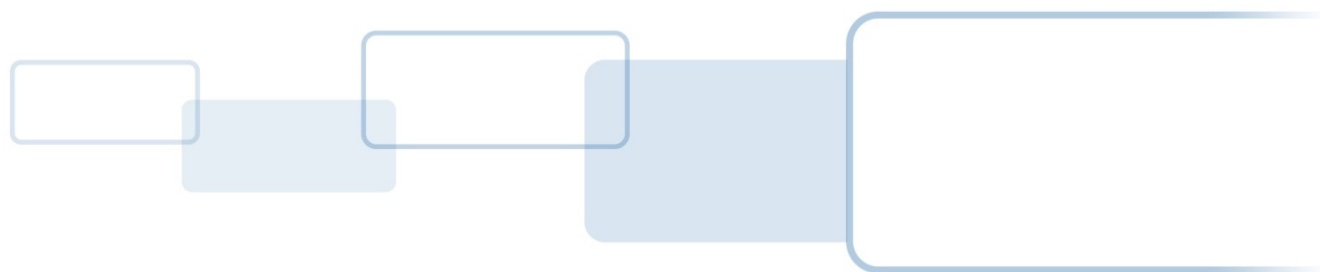
Physical Access

Secure Issuance

Identity and Access Management (IAM Solutions)

DOC-00083, Rev. 5.6

August 2017



Contents

- 1 Welcome 4**
- 2 Support Offerings 5**
 - 2.1 Overview 5
 - 2.2 Support Offerings..... 5
 - 2.3 Support Services..... 6
 - 2.4 FARGO Authorized Service Provider/Authorized Repair Provider (ASP/ARP) Programs 7
- 3 Contacting Technical Support 8**
 - 3.1 Overview 8
 - 3.2 Web Support 8
 - 3.3 Telephone Support 8
 - 3.4 Email Support..... 10
 - 3.4.1 Following-Up an Existing Case via Email 10
 - 3.4.2 Initiating a Case via Email 10
 - 3.5 Embedded Solutions Applications Engineering..... 10
- 4 Case Management..... 11**
 - 4.1 Overview 11
 - 4.2 Support Self-Service (Knowledge Base)..... 11
 - 4.3 Support Levels..... 11
 - 4.3.1 Definitions of Support Levels 11
 - 4.3.2 Support Level Responsibility 13
 - 4.4 Certification Training 13
 - 4.5 Service Level Agreement (SLA)..... 14
 - 4.6 Request Types 15
 - 4.6.1 Defects / Bugs 15
 - 4.6.2 Enhancement Requests..... 15
 - 4.6.3 Requests for Technical Assistance..... 15
 - 4.6.4 Embedded Solutions Support Requests..... 17
 - 4.6.5 RMA Requests 17
 - 4.6.6 Sales and Pre-Sales Assistance..... 17
 - 4.6.7 Customer Service..... 18
 - 4.7 Support for Third-Party Products 18
 - 4.7.1 Third-Party products sold by HID..... 18
 - 4.7.2 Third-Party products tested for compatibility by HID..... 18
 - 4.7.3 Third-Party products neither sold by nor tested for compatibility by HID 19
 - 4.8 Escalation Procedures 19
 - 4.8.1 Embedded Solutions 19
 - 4.9 Surveys..... 19
 - 4.10 Log Files and Customer Data 19
- 5 Maintenance..... 21**
 - 5.1 Overview 21
 - 5.2 Maintenance Definitions 21
 - 5.2.1 Upgrades / Major Releases..... 21
 - 5.2.2 Updates / Minor Releases 21
 - 5.2.3 Service Packs / Patch Release 21
 - 5.2.4 Hotfixes / Builds 22

- 5.3 HID Approve App Store Publishing and Beta 22
 - 5.3.1 Responding to Operating System Updates 22
 - 5.3.2 Bug fixes and New Functionality 22
- 5.4 Maintenance Downloads 23
- 5.5 End of Life..... 24
 - 5.5.1 Embedded Solutions EOL 24
- 6 Support Procurement and Renewal Process 25**
 - 6.1 Overview 25
 - 6.2 Initial Procurement..... 25
 - 6.2.1 ActivID 25
 - 6.2.2 pivCLASS..... 25
 - 6.3 Renewal 25
 - 6.3.1 Reinstatement Fees and Termination 26
 - 6.4 Purchasing Additional Licenses with Support (ActivID) 26
- 7 Warranty, the Return Merchandize Authorization (RMA) Process, and Special Hardware Support 27**
 - 7.1 Overview 27
 - 7.2 PACS and Secure Issuance Products..... 27
 - 7.2.1 Warranty 27
 - 7.2.2 RMA 27
 - 7.3 ActivID Products..... 27
 - 7.3.1 Warranty 27
 - 7.3.2 RMA 28
 - 7.4 Embedded Solutions Products 29
- Appendix A: Managed Services 30**
 - A.1 ActivID Authentication Managed Service 30
 - A.1.1 Service Availability 30
 - A.1.2 Scheduled Downtime 30
 - A.1.3 Unscheduled Downtime 30
- Appendix B: HID Technical Support Holidays 31**
 - B.1 US Offices Holidays 31
 - B.2 Mexico Office Holidays..... 31
 - B.3 Brazil Office Holidays..... 31
 - B.4 UK Offices Holidays 32
 - B.5 France Office Holidays 32
 - B.6 Hong Kong Office Holidays..... 32
 - B.7 China Office Holidays..... 33
 - B.8 India Bangalore Office Holidays..... 33



1 Welcome

This handbook is designed to help you become acquainted with Technical Support at HID Global and get the most out of your Support experience. Please review this handbook in its entirety so that you are aware of how to locate the information you require at any point in the future.

All products in HID Global Physical Access (Credentials, Readers, Network Controllers, & EasyLobby), Secure Issuance (FARGO, Asure ID), and Identity and Access Management (IAM) Solutions¹ (ActivID, OMNIKEY) are covered by this handbook.

Government ID Solutions (LaserCard Optical Media Cards, ePassports), Identification Technologies (IDT) (RFID Tags such as Animal Tags, Clothing Tags, etc.), PEAKE, Impro, DemoTeller, Bluvision and Quantum Secure products are not covered.

This handbook is for HID Global Customers. The term Customer is used to refer to any entity that has purchased products or services directly from HID Global, such as Distributors, Original Equipment Manufacturers (OEMs), and Integrators.

¹Except for Lumidigm (biometrics) and IdenTrust.

2 Support Offerings

2.1 Overview

HID Global offers a wide variety of products to meet many different needs and solve problems of greatly varying complexity. As such, HID Technical Support offerings vary considerably depending on the nature of the product. This section covers available HID Global Support offerings and the services they include.

2.2 Support Offerings

HID provides multiple Technical Support offerings: Free Support, Standard and Premium Technical Support, and various Custom Support offerings.

Technical Support is the ability to contact the HID Technical Support department for the resolution of suspected problems with HID hardware and software, while *Maintenance* is the provisioning of upgrades and updates. See *Section 5: Maintenance*, for more details. Standard and Premium Support offerings include both Technical Support and Maintenance, and for these offerings Technical Support and Maintenance cannot be purchased separately. For Free Support and Custom Support offerings, Maintenance is always free unless noted otherwise. In addition to Technical Support, hardware items also have Warranty periods. See *Section 7: Warranty, the Return Merchandize Authorization (RMA) Process, and Special Hardware Support*.

HID Global Technical Support offerings vary by product, as listed in the following table.

Table 1: HID Support Offerings Availability by Product

Product	Free Support	Custom Support (Paid)	Standard Support (Paid)	Premium Support (Paid)
Physical Access				
Physical Access readers ¹ , credentials ² , EasyLobby ³ , and Networked Controllers	•			
pivCLASS [®] PAM and Software			•	
Secure Issuance				
FARGO printers	•			
Asure ID ⁴	•	•		
Asure ID SDK ⁴		•		
FARGO SDK ⁴		•		
IAM Solutions				
ActivID [®] Authentication Server, ActivID [®] Appliance, ActivID [®] AAA, ActivID [®] CMS, ActivID [®] BMS, ActivID [®] ActivClient [®] , ActivID [®] Validation products, HID Approve™, and HID PIV IDMS ⁵			•	•
OMNIKEY [®]	•			
Embedded Solutions				
OEM Readers, Modules, and Chipsets ⁶	•	•		

Note: For Warranties, see *Section 7: Warranty, the Return Merchandize Authorization (RMA) Process, and Special Hardware Support*.

¹Physical Access readers includes pivCLASS readers.

² The word *Credentials* as used throughout this document includes all form factors such as cards, Mobile IDs, tags, and fobs, and also includes Crescendo smart cards functionality but not including development. Support for Crescendo smart cards includes support for Crescendo middleware. For ActivClient middleware, see *IAM Solutions* in the table above.

³ For EasyLobby, Technical Support is free and Maintenance is a paid service.

⁴ Asure ID Customer Support is always free of charge for Customers. For your End Users contacting HID Technical Support directly, Asure ID Technical Support is free for the first 90 days, after which an Asure ID Protect Plan must be purchased. The Asure ID SDK comes with 8 hours of developer support. FARGO SDK Technical Support may be purchased in 1, 3, 5, or 8 hour increments.

⁵ For the ActivID Managed Service (see *Appendix A:*), Premium 24x7 Support is included in the cost of the service.

⁶ Embedded Solutions paid support covers Custom Product Opportunities (CPOs) which are projects for customized OEM products (e.g. a custom tuned antenna). Free Support includes design-in effort as covered in section 2.5 below.

2.3 Support Services

The following table outlines the different services available for each Support offering.

Table 2: Services Included in the Technical Support Offerings

Support Services	Free Support	Custom Support	Standard Support (8x5)	Premium Support (24x7)
Support outside of business hours ¹				•
Service Level Agreement (SLA) ²			•	•
Access to Support via Web, Email, and Phone (business hours) ¹	•	•	•	•
Software: Upgrades, Updates, Service Packs, and hotfixes via website, portal, or email ³	•	•	•	•
Hardware: Firmware and Driver Upgrades and hotfixes (Secure Issuance, ActivID, EasyLobby, Networked Controllers, Embedded Solutions, and OMNIKEY only) ⁴	•	N/A	N/A	N/A

Note: For Warranties, see *Section 7: Warranty, the Return Merchandize Authorization (RMA) Process, and Special Hardware Support*.

¹ Opening a Case via email is not offered for all products. See *Section 3.4: Email Support* for more details. Business hours are defined in *Table 3: HID Technical Support Hours, Languages, and Phone Numbers per Product and Region* or the *Technical Support website*, <https://www.hidglobal.com/support>.

² The Service Level Agreement found in *Table 4* also applies to Free Support in the specific case of Mobile Access.

³ Access to upgrades, updates, and hotfixes for Standard and Premium Support depend on Support and Maintenance payments being current. See *Section 5.4: Maintenance Downloads* for more information on how to obtain updates. See *Section 5.5: End of Life* for information related to Updates.

⁴ Driver updates for the EasyLobby Intellicheck® DCM, Acuant, and AssureTec devices require that a current EasyLobby Maintenance contract be in place. Firmware and driver upgrades for legacy products are available on a limited basis. Contact Technical Support for more detailed information.

2.4 FARGO Authorized Service Provider/Authorized Repair Provider (ASP/ARP) Programs

HID FARGO Authorized Service Providers (ASPs) are able to provide quality timely technical support and repairs to their End Users. ASPs attend a multi-day training course to become certified.

HID FARGO Authorized Repair Providers (ARPs) are an extension of the HID Global Repair Department and are paid by HID to perform repairs. To qualify to become an ARP, providers must first become an ASP.

Contact your sales account representative for more information about the ASP or ARP program. For general Warranty information, see *Section 7: Warranty, the Return Merchandize Authorization (RMA) Process, and Special Hardware Support*.

3 Contacting Technical Support

3.1 Overview

Before contacting HID Technical Support, please make sure that you have read through all of the Technical Support policies in *Section 4: Case Management*.

3.2 Web Support

Web Support is provided for all products and all Support offerings.

Web Support: Physical Access and Secure Issuance

Option 1: One-time online Case submission

URL: <https://www.hidglobal.com/support/technical-support-case>

Registration: None

Option 2: Submit and Manage Cases online

URL: <https://www.hidglobal.com/support/technical-support-customer-portal>

Registration: Customers can register for an account if they do not have an account already. Users at the same company can view and update each other's Cases online.

Web Support: ActivID

URL: <https://support.actividentity.com>

Description: Submit Cases and view/update existing Cases online

Registration: If you do not have an account with the ActivID Support Center, then one will be created for you the first time you email support@actividentity.com.

Note: It is strongly recommended that any email or Web-initiated technical support requests for Urgent problems be followed up with a phone call to ensure the shortest possible response time. See *Table 4: Service Level Agreement for Standard and Premium Support*, for the definition of **Urgent**.

3.3 Telephone Support

To contact HID Technical Support by telephone, consult the following table. Hours listed apply to Free and Standard Support only, Monday through Friday, and do not include local holidays. Holidays are listed in Appendix B for each major Technical Support office. If Premium Support is purchased, then phone hours are 24 hours a day, 7 days a week.

Note: The ActivID phone system provides an option to indicate if you are a U.S. Federal Government Customer. This decision tree must be followed in order to be directed to a member of the support organization that is a U.S. citizen based in the United States.

Table 3: HID Technical Support Hours, Languages, and Phone Numbers per Product and Region

Country	Products	Hours	Language(s)	Contact Information
North America (US and Canada) Central Time	Card Readers, Credentials, Mobile Access	07:00 - 19:00	English	+1 866 607 7339 +1 949 732 2383
	FARGO Printers/Asure ID, EasyLobby	07:00 - 18:00		
	Networked Controllers	08:00 - 18:00		
	pivCLASS	08:00 - 18:00	English	+1 866 607 7339, option 5 +1 949 732 2383
	ActivID® Authentication Server, ActivID® Appliance, ActivID® AAA, ActivID® CMS, ActivID® BMS, ActivID ActivClient®, ActivID® Validation products, HID Approve™, Tokens and HID PIV IDMS	08:00 - 19:00	English	+1 800 670 6892
Biometrics (Lumidigm)	11:00 - 19:00	English	+1 505 272 7057	
Mexico / Central and South America Central Time [†] Atlantic Time [‡]	Card Readers, Credentials, FARGO Printers/Asure ID, EasyLobby, Networked Controllers, Mobile Access	09:00 - 18:00	Spanish[†]	+52 55 5081 1657
			Portuguese[‡]	+55 11 5514 7100
	Biometrics (Lumidigm)	11:00 - 19:00	English[†]	+1 505 272 7057
Europe Middle East Africa	Card Readers, Credentials, FARGO Printers/Asure ID, EasyLobby, Networked Controllers, OMNIKEY, Mobile Access	08:30 - 17:30 (17:00 Friday) <i>UK Time</i>	English, Spanish	+44 (0) 1440 711 822
		09:00 - 17:00 <i>CET</i>	French, Spanish	+33 (0) 1 42 04 80 80
	ActivID® Authentication Server, ActivID® Appliance, ActivID® AAA, ActivID® CMS, ActivID® BMS, ActivID ActivClient®, ActivID® Validation products, HID Approve™, Tokens and HID PIV IDMS	09:00 - 17:00 <i>CET or per contract</i>	English	+44 (0) 1483 541 544
			French, Spanish, English	+33 (0) 1 42 04 80 80
Biometrics (Lumidigm)	11:00 - 19:00 US Central Time	English	+1 505 272 7057	
Asia Pacific	Card Readers, Credentials, FARGO Printers/Asure ID, EasyLobby, Networked Controllers, Mobile Access	09:00 - 18:00 Hong Kong Time	English, Cantonese, Mandarin	+852 3160 9833 (Hong Kong)
		09:00 - 18:00 India Standard Time		+86 755 8835 3187 (China) +91 8042561200 (India)
	ActivID® Authentication Server, ActivID® Appliance, ActivID® AAA, ActivID® CMS, ActivID® BMS, ActivID ActivClient®, ActivID® Validation products, HID Approve™, Tokens and HID PIV IDMS	09:00 - 18:00 Singapore Time	English	+852 3160 7137 +61 3 9111 2319 (Australia)
	Biometrics (Lumidigm)	11:00 - 19:00 US Central Time	English	+1 505 272 7057

3.4 Email Support

3.4.1 Following-Up an Existing Case via Email

Email may be used when follow-up is necessary for a Case opened via the Web or Phone. When using email for following-up with a Case, replying to the emails from HID Technical Support will ensure that the relevant HID support email address is used and the Case-specific subject line remains intact. This is necessary for proper logging of the email to the HID Case tracking system and will ensure the quickest possible reply. An email without the subject line denoting an existing Case will create a new Case.

3.4.2 Initiating a Case via Email

Initiating a Case via email is possible for ActivID products. For other products, see Section 3.2: *Web Support* and 3.3: *Telephone Support*.

ActivID Technical Support Email addresses:

support@actividentity.com

support-usa@actividentity.com (U.S. Government Customers)

Notes:

When opening incidents via email, it will facilitate the processing of your incident if the subject line is in the following format:

Subject Line: Reseller and Customer Name – Product and Version – Brief Description of Problem
e.g.:

Subject Line: Security-R-US for ACME Co – CMS 4.2 – Having trouble issuing smart card

Please also include the severity level in your email body.

It is strongly recommended that any email or Web-initiated technical support requests for Urgent problems be followed up with a phone call to ensure the shortest possible response time. See *Table 4: Service Level Agreement for Standard and Premium Support*, for the definition of **Urgent**.

3.5 Embedded Solutions Applications Engineering

Embedded Solutions applications engineering support is provided directly with the assigned Regional or Head Applications Engineer by direct line phone and email. The contact information for the applications engineering teams is not presented in this document, as applications engineering support is only available post Product Development License Agreement (PDLA) execution.

4 Case Management

4.1 Overview

This section covers best practices for getting your Technical Support Case resolved at HID Global.

4.2 Support Self-Service (Knowledge Base)

It is strongly advised that customers search the Knowledge Base before opening a Case with HID. Many common issues are covered in the Knowledge Base.

Knowledge Base: Physical Access and Secure Issuance

URL: <https://www.hidglobal.com/support/knowledge-base>

Registration: No login required

Knowledge Base: ActivID

URL: <https://support.actividentity.com>

Registration: If you do not have an account with the ActivID Support Center, then one will be created for you the first time you email support@actividentity.com.

4.3 Support Levels

4.3.1 Definitions of Support Levels

4.3.1.1 Level-1

Technical Support consists of basic End User questions that can usually be answered by referring to the product documentation, HID Global website, or Knowledge Base.

Example (PACS): A question such as “How do I enroll cards onto my EntryProx?” can be answered by referencing the product documentation.

Example (Secure Issuance): A question such as “Can I upgrade my current printer with options for dual-sided printing or magnetic encoding?” can be answered by referencing the product datasheet for information <http://www.hidglobal.com/products/card-printers/fargo>.

Example (IAM Solutions): A question such as “I would like to move from Windows® XP to Windows 7. Will this be supported?” can generally be answered by referencing the Supported Platforms section of the product documentation.

4.3.1.2 Level-2

Technical Support involves attempting to reproduce the issue with a duplication of the Customer or End User environment, collecting logs, and qualifying the support request particulars. Level 2 Technical Support is usually performed by the Customer that purchased products directly from HID Global when no solution could be found through Level-1 technical support. Level 2 Technical Support skills are usually gained by attending an HID Academy course on-line or in person.

Example (PACS): Question: “I have a new installation of cards and readers and the access control system reports occasional misreads from the readers.” Assuming Level 1 research was unable to resolve the problem. Level 2 Technical Support could involve:

1. Performing basic troubleshooting, e.g.
 - Checking that the reader configuration and the card part number are compatible
 - Checking the environment (power supply voltage / current / type, cabling type, length and route)
 - Substituting reader positions (does the problem follow the reader or the position?)
 - Are the card holders carrying any other cards that the reader is capable of reading? (e.g. iCLASS Legacy and SE readers can read "Pay Pass" radio frequency credit cards).
2. Gathering information, e.g.
 - Make and model of all hardware (readers, credentials)
 - Reader firmware version
 - Credential Sales order number

Example (Secure Issuance): The printer has stopped during the print process and displays an error message.

Assuming a search of the Knowledge Base did not reveal the answer (Level 1), Level 2 Technical Support could involve:

1. Performing basic troubleshooting, e.g.
 - Using the user guide or service manual troubleshooting section and searching through the error codes for a solution
 - Upgrading the printer driver and firmware to the latest versions
<http://www.hidglobal.com/drivers>
 - Any other installation, configuration, or adjustment changes that can be performed as a part of the troubleshooting process
2. Gathering information, e.g.
 - Number of printers experiencing the problem
 - Make and model of all hardware
 - Error codes
 - Version numbers for all hardware, software, and firmware
 - Asure ID Operating System and license key.

Example (IAM Solutions): An End User has the question: "I am getting an error when trying to install the product on Windows 7." Assuming Level 1 research was unable to resolve the problem, Level 2 Technical Support could involve:

1. Attempting to reproduce the error (installing the same product version on Windows 7 to see if the same error can be produced)
2. Performing basic troubleshooting, e.g.
 - Asking the customer to try a second Windows 7 machine that has been freshly installed
 - Performing a hash calculation of the product installation download file to verify its integrity
 - Witnessing the customer's error on a Web or video sharing session if possible
3. Gathering information, e.g.
 - Information about the error (screenshots, error text, checking for logs in Windows Event Viewer, etc.)
 - Information about the environment (any recent changes to the machine, peripheral versions (if appropriate), etc.)
 - Product log files, if any
 - Step-by-step instructions for how the error is reproduced by the End User

4.3.1.3 Level-3

Technical Support is performed by HID Technical Support after Level-1 and Level-2 technical support efforts are unable to resolve the support request. HID Technical Support will act as the single point of contact to work with the direct end customer or Distributor/OEM and provide communications throughout the process. Level-3 technical support also includes the creation of Hot Fixes by the HID Engineering team as and when determined necessary by HID.

Example:

1. Reviewing all information gathered from Level 2 Technical Support
2. Performing advanced troubleshooting
3. Escalating the Case to HID Engineering as necessary

4.3.2 Support Level Responsibility

HID provides Level-3 support to entities that have purchased directly from HID. HID does not provide Level-1 and Level-2 technical support. With few exceptions (see the description of FARGO support in *Table 2: Services Included in the Technical Support Offerings*) HID does not provide support to indirect customers or End Users.

Customers are required to provide Level-1 and Level-2 support to their channel partner &/or End User in order to qualify all technical support requests prior to engaging HID Technical Support. Unqualified requests may be sent back to the customer for further evaluation.

Please also refer to the General Sales Policy at:

https://www.hidglobal.com/sites/hidglobal.com/files/resource_files/current-sales-policy for more information.

4.3.2.1 ActivID

For ActivID products, Customers may decide to outsource Level-1 and Level-2 Technical Support to a third party, such as a member of the Implementation Partner Program. Such third parties must abide by the same policies as outlined in this handbook.

4.3.2.2 Embedded Solutions

Embedded OEM technical support is limited to Level 3 support as defined above after the following basic troubleshooting is completed by the OEM.

1. Minimum of 5 units exhibiting issue,
2. Recreation of issue outside embedded environment,
3. Logic Analyzer Session of all I/O,
4. Configuration verification, and
5. Swapping known-good/known-bad unit.

All the above is mandatory and helps HID better understand and recreate the reported behavior and drive to root cause faster, providing world class service to the embedded OEM community.

4.4 Certification Training

Certification Training may be required for particular products such as ActivID and pivCLASS. When certification is required, certified support personnel must be on staff at the direct customer, Integrator, Distributor, or third-party support provider to ensure Level-1 and Level-2 technical support. Certification must be obtained for each product owned/resold.

Customer personnel are certified by passing the certification exams for the products they are supporting. Certification on any particular software product only applies to the major product version (e.g. 5.x vs. 6.x) used at the time of the certification exam. Certification on products does not guarantee access to product support services; rather, support services are provided only in connection with payment of the applicable support fees. For information on the latest, full course schedule, see <http://www.hidglobal.com/hid-academy>.

4.5 Service Level Agreement (SLA)

The following Service Level Agreement (SLA) table applies to software that is covered by a Standard (8x5) or Premium (24x7) Support contract in good standing, as well as the Mobile Access portal¹. Hardware is covered under the terms of the HID Warranty agreements. See *Section 7: Warranty, the Return Merchandize Authorization (RMA) Process, and Special Hardware Support*.

Table 4: Service Level Agreement for Standard and Premium Support

Severity Level	Description	Initial Response Time ²	Status Updates	Restoration or Resolution Target (Workaround or hotfix)
1 - Urgent/Critical	Production system is down or is severely impacted	Within 60 minutes (pivCLASS: 1 Business Day)	As agreed with customer	Continuous efforts
2 - High	Product can be used but an important function is not available	Within 60 minutes (pivCLASS: 1 Business Day)	Daily	Daily effort
3 - Medium	Product can be used but some moderate impact or functional restrictions	Within 1 day (pivCLASS: 1 Business Day)	5 working days	Weekly effort
4 - Low	Minor non-significant problem, request for enhancement, or documentation issue	Within 1 day (pivCLASS: 1 Business Day)	To be determined based upon the problem	

¹ Urgent/Critical and High Severity Level issues only

² An Initial Response is a first technical analysis, normally via return email. An Initial Response Time is considered instantaneous for a Case initiated by telephone.

Notes:

HID may modify the SLA guidelines at any time; however, no modification to the service level agreement will take effect for current customers until such time as they renew their support contract.

SLA times are considered “on hold” when HID is waiting for the Customer to supply information, e.g. waiting for the Customer to send a log file.

This SLA table applies to incidents that were properly pre-qualified with steps to reproduce, as applicable.

For elements of the SLA specific to the Managed Services, see *Appendix A: Managed Services*.

4.6 Request Types

4.6.1 Defects / Bugs

Defects or Bugs, are problems that exist within a product that prevent the product from performing a function that the product documentation claims it can perform. If a suspected defect is confirmed by HID Technical Support, the Technical Support Engineer will log the defect in the HID Global issue defect tracking system. New product code or a hardware change is generally necessary in order to resolve a defect. If the defect is confirmed by Engineering, new code is usually delivered as a hotfix if the customer is experiencing an emergency situation. In some cases, HID may decide to address a defect in a future release of the product, particularly if the creation of a hotfix is not possible.

4.6.2 Enhancement Requests

Enhancement Requests are additional product features suggested by customers to make the product easier to use or add new functionality. Enhancement Requests are tracked in the same HID Global issue tracking system as product defects, and are generally reviewed at each new product version release. If an enhancement request is urgent, then contact your sales representative to discuss a possible CPO (Custom Product Opportunity).

For any enhancement request, HID Technical Support may request the following information:

- HID Global support ticket #
- Customer Name
- Product Name
- Total number of users using the product
- Percentage/Number of users affected by the issue

Frequency of issue:

- User Impact Statement (e.g. user experience, performance) (one paragraph)
- Business Impact Statement (Business Impact Statement (e.g. regulatory compliance, revenue impact - please quantify as much as possible) (up to three paragraphs)
- Business impact level: (Low, Medium, High, Critical)
 - Low Impact is defined as: Minor problem with small impact or functional restriction, impacting a small number of users (less than a hundred).
 - Medium Impact is defined as: Product can be used but some moderate impact or functional restrictions, impacting a moderate number of users (hundreds), several times a week.
 - High Impact is defined as: Product can be used but an important function is not available, impacting a large number of users (thousands), several times a week.
 - Critical Impact is defined as: Production system is down or is severely impacted"

4.6.3 Requests for Technical Assistance

Requests for Technical Assistance are requests that are not related to product defects or suggested enhancements but are requests regarding the installation, implementation or configuration of HID products. These request types are not covered by HID Technical Support. In such cases, HID Support will forward these requests to the appropriate internal group, for example, Customer Service, Sales, or most commonly, HID Professional Services. Services may be on a separate fee basis. Requests for Technical Assistance include, but are not limited to:

- Installation/Deployment, or Upgrades
 - HID Installations or Upgrades
 - Third-party Installations or Upgrades (e.g. Databases, Hardware Security Modules (HSMs), Certificate Authorities)
- Integrations

- Integrations between HID and third party products (e.g. Banking applications or PACS systems)
- HID or third-party SDK/API-related integrations requiring coding assistance

- Configurations
 - Complex configurations (e.g. High Availability (HA) and failover)
 - Database configuration, tuning, and backup
 - Security hardening
 - Performance tuning
- Customizations
 - Customizing HID products (e.g. New or updated custom smart card profiles or SSO scripts)
 - Custom migration of or upgrade/maintenance issues with any code that has been developed by Professional Services
 - Custom Training
- Migrations
 - Migrating from one HID product to another (e.g. ActivID AAA to ActivID Authentication Server)
 - Switching product vendors from a third party to HID
 - Moving existing software to a new hardware platform

4.6.4 Embedded Solutions Support Requests

Embedded solutions support requests are handled directly with the Regional and/or Head Applications Engineer assigned to the embedded OEM.

4.6.5 RMA Requests

Return Merchandise Authorization (RMA) Requests are requests to return products that were delivered incorrectly, or are faulty or suspected of being faulty. See *Section 7: Warranty, the Return Merchandise Authorization (RMA) Process, and Special Hardware Support* for details on the RMA process.

4.6.6 Sales and Pre-Sales Assistance

If you are seeking assistance on pilot installations, development tool kits (DTK), demonstration units, pre-releases (alphas, betas, etc.), are interested in sample products, or have technical questions about product features and differences for making purchasing decisions, then please contact your Sales account manager – unless specific instructions were otherwise specified (e.g. participation in a particular beta program may involve the Technical Support team). To find your Sales representative, use the sales tool at <http://www.hidglobal.com/worldwide-sales-tool>.

4.6.7 Customer Service

If you have an order related inquiry (e.g. sales order number enquires, part numbers, credential programming information), then please contact an HID Customer Service representative.

Contacting Customer Service

<http://www.hidglobal.com/customer-service>

You can also look up the status of an order online

Order Status Lookup

<https://orderstatus.hidglobal.com/WebOrderStatus/>

Note: iCLASS SE Configuration Cards for changing the functionality of Physical Access Readers are orderable from HID Customer Service. HID Prox, Indala Flexenterprise/ Flexsmart, and standard iCLASS configuration cards may be requested from Technical Support.

4.7 Support for Third-Party Products

Third-party products are products not manufactured by HID. HID offers varying levels of support for third-party products depending on the relationship between HID and the third-party.

4.7.1 Third-Party products sold by HID

For a product that HID sells that is manufactured by a third-party, HID offers the same support for the product as it would for a product manufactured directly by HID. HID Technical Support, with assistance from the Customer, may need to consult with the original manufacturer in the process of getting an issue resolved. Support for re-sold third-party products is only performed in the context of their operation with other HID products.

Examples:

- Hardware Security Modules (HSMs)
- AET Middleware for Crescendo cards
- EasyLobby Hardware Accessories

4.7.2 Third-Party products tested for compatibility by HID

For a third-party product that HID does not sell but tests for compatibility, HID will endeavor to assist in the troubleshooting of an issue with the third-party product only as it relates to the functioning of the HID product. The third-party product must be of a compatible version listed in the product documentation or data sheet. Troubleshooting the problem may involve removing the third-party product from the environment. HID Technical Support will assist the Customer in opening a support case with the third-party provider as necessary.

Examples:

- Operating Systems
- Databases
- Mobile Phones

4.7.3 Third-Party products neither sold by nor tested for compatibility by HID

For a third-party product that HID does not sell and does not test for compatibility (or the third-party product is of an untested version) HID only offers best-effort support. If an issue is suspected with the unsupported third-party product, the Customer may be asked to change to a supported version or supported third-party product. If there is a suspected problem with the third-party product in relation to its operation with an HID product, a support case may need to be opened by the Customer to the third-party. Products developed by Embedded Solution's OEMs are considered to be this category of product.

Examples:

- Access Control Panels
- Networking Hardware
- Certain biometric enrollment readers

4.8 Escalation Procedures

The escalation process is designed to alert higher level managers when there is a need for additional resources to resolve an incident in a timely fashion. Customers that are direct account holders at HID concerned with the handling of a particular incident should use the contact points below.

First Escalation: Regional Support Manager HID_Technical_Support_Management@hidglobal.com

Second Escalation: Director of Technical Support HID_Technical_Support_Directors@hidglobal.com

Third Escalation: Senior Director of Technical Support
HID_Technical_Support_Senior_Director@hidglobal.com

4.8.1 Embedded Solutions

In cases where additional support is required for embedded OEMs, send an email to: Embedded_Directors@hidglobal.com.

This email is distributed to each regional director and Global Applications Engineering Manager/Director.

4.9 Surveys

When a Technical Support Case is closed, the Case Management system sends an email to the customer asking them to participate in a survey of their experience with HID Technical Support. Customer feedback, both positive and negative, is strongly encouraged and appreciated.

4.10 Log Files and Customer Data

This section applies only to ActivID products.

For customers concerned about sending potentially sensitive information via email, the support engineer shall agree with the customer on a secure method to exchange sensitive information, providing confidentiality, integrity, and availability. For example, an FTP account specific to the support incident can be created for uploading log files. If an FTP account is not desired, files can be sent on media by traditional mail. The FTP account and its contents are destroyed within 48 hours of the incident closure unless requested otherwise by the customer. Support personnel shall use a separate communication channel (physical or logical) to exchange shared secrets used to protect transport of sensitive information. Log files are never sent to a third-party without a customer's consent.

For U.S. Government customers, log files are not sent out of the country for analysis without prior consent. Log files are kept on a secure FTP server for U.S. Government customers only and kept for at least 18 months.

Customers are responsible for providing clean information (for instance software logs or screen capture) absent any Personal Information before they send it to HID Support for troubleshooting purposes.

Personal information means information, recorded in a material form or not, about an individual whose identity is apparent, or can reasonably be ascertained from the information. Knowledge Base articles describing how to clean Personal Information from log files exist for each product.

In the event that HID support receives log files that have been compromised, we will:

- Notify the customer and attempt to quarantine the files
- Raise the issue to the customer so non-compromised files can be provided.
- Delete all copies of the information

In the event that HID Support receives Personal Information in customer data, we will:

- Notify the customer and HID's Privacy Officer
- Seek for customer's approval to continue work
- Delete all copies of the information if we don't get this approval

5 Maintenance

5.1 Overview

Maintenance is the provisioning of Upgrades and Updates. The decision to create an Upgrade or an Update is at HID's sole discretion. Maintenance is subject to the terms, conditions and restrictions in the customer's license agreement.

Note: If Maintenance is not provided for particular product, then it will be indicated in the license agreement.

5.2 Maintenance Definitions

HID products use sequence-based versioning schemes to give each new release a unique identifier. The scheme is generally a two-to-five position sequence (with four positions being the most common) separated by '.' characters such as version 4.3.10.

A release can also have a shorter name used for marketing purposes. For example, a release can be officially designated as 7.6.000.8 but be referred to commonly as "Version 7.6".

Each number in the sequence represents a different category level or level of significance. For example, 7.6.300.8 represents the 8th build of the 3rd Service Pack of the 6th minor release of the 7th major release.

5.2.1 Upgrades / Major Releases

Upgrades or Major Releases contain new major features and can contain bug fixes. A Major Release is indicated by incrementing the numeral immediately to the left of the first '.' character in the version number of the software, e.g. the release following version 4.6 could be 5.0.

Major Releases may not provide an upgrade path from the previous major release or guarantee backwards compatibility (backwards compatibility is often referred to as having been "regression tested"). Always check the release notes for specific information about compatibility.

Major Releases usually require that new product documentation and a new training course be created to cover new features.

5.2.2 Updates / Minor Releases

Updates or Minor Releases contain new minor functionality and can contain bug fixes. A Minor Release is usually indicated by incrementing the numeral to the right of the first '.' character in the version number of the software, e.g. the release following version 4.100 could be 4.200.

Minor Releases generally provide an upgrade path from the previous minor release and generally guarantee backwards compatibility. Always check the release notes for specific information about compatibility.

Minor releases generally do not require re-training, but might include updates to product documentation.

5.2.3 Service Packs / Patch Release

A Service Pack or Patch Release is generally a collection of hotfixes and other bug fixes that has been fully regression tested (a hotfix on its own, by definition, is not fully regression tested). See *Section 5.2.4: Hotfixes / Builds*. A Service Pack can also contain new functionality, or can refer to a collection of releases, e.g. a Service Pack for a printer might contain both a firmware release *and* a driver update. Service Packs are generally denoted with an "SP" added to the end of the version number: e.g. the first Service Pack for version 6.6 may have the official version number of 6.6.100.3 but be commonly known as 6.6 SP1.

Service Packs generally provide an upgrade path from the previous release and generally guarantee backwards compatibility. Always check the release notes for specific information about compatibility.

A Service Pack generally does not include any updates to training material or product documentation. Service Pack installation instructions are generally provided within a README file, Release Notes, or the Product Documentation.

5.2.4 Hotfixes / Builds

A hotfix is a patch that has been released to address an urgent defect in the product. When HID releases a hotfix, HID sends an email notification to its IAMS (ActivIdentity) customers and partners as soon as a new hotfix is released.

There are two types of notifications according to the criticality of the hotfix:

- The standard hotfix notification which is used for the standard hotfixes (most common case).
- The critical hotfix notification which is sent only when a security update or critical hotfix is released.

Critical hotfixes are designed to mitigate significant vulnerabilities and/or adverse performance. Failure to apply critical hotfixes within 90 days after their release will impact HID's ability to honor any SLA.

Hotfixes are generally cumulative: e.g. they contain all other previously released hotfixes on the same Minor Release, Service Pack or Patch Release.

A Build is an internal version of a release that is used for quality testing purposes. For example, 5.6.000.1 is the first build for version 5.6. If problems are found with 5.6.000.1, then version 5.6.000.2 is created. If 5.6.000.2 passes all quality tests, then it will be the version released to customers. A Build number might not always be present in the version number.

A hotfix generally does not include any updates to training material or product documentation. Typically, the only documentation provided with a hotfix is a README file or Release Notes with a list of bugs fixed and installation instructions.

5.3 HID Approve App Store Publishing and Beta

New releases of Applications (such as HID Approve, ActivID Token, etc.) distributed via app stores (like Apple App Store, Google Play, Microsoft Store, etc.) may be driven by interoperability updates for operating systems, bug fixes, hotfixes, and/or new product functionality.

HID Global will run a beta program for any new major version of an Application published via an app store. Customers will be notified of the beta program and are strongly encouraged to participate in the beta program to test non-regression, try new capabilities, and provide feedback.

New Application releases are generally scheduled to be published to app stores on a Tuesday and HID Global will inform customers of a new release via a product alert notification email at the start of the notification period.

5.3.1 Responding to Operating System Updates

Upon the release of a new version of an operating system (like iOS, Android, Windows, etc.), HID Global will assess interoperability with their own Application, and, if necessary, strive to publish an updated version of the Application to the respective app store within 25 business days after the commercial release date of the new operating system version.

New Application releases are generally scheduled to be published to app stores on a Tuesday and HID Global will inform customers of a new release via a product alert notification email at the start of the notification period.

5.3.2 Bug fixes and New Functionality

HID will provide a notification period of at least two weeks in advance of a release of an Application published to an app store driven by non-critical bug fixes or new product functionality. In the exceptional case of an urgent release due to a critical hotfix, HID Global will deliver an updated

version of the Application as soon as possible with a reduced notification period and the possibility of no beta program whatsoever.

5.4 Maintenance Downloads

The following table outlines how Maintenance Updates are retrieved by product. If download information is unavailable for a particular product upgrade or update, contact Technical Support for assistance.

Table 5: Maintenance Updates by Product

Product	Maintenance Updates
Physical Access	
Readers, Credentials	N/A
EasyLobby	Email or Download provided by HID Technical Support ¹
Networked Controllers (NAS)	Developer Center ² or HID Global Web Site 'Drivers and Downloads' section ⁴ for EDGE Solo, Discovery GUI, and Jumpstart
pivCLASS (including pivCHECK)	Download provided by HID Technical Support ¹
Mobile Access App	New versions of the App which resides on a mobile devices can be updated by using the standard procedures offered by Android and iOS (e.g. Google Play Store or iTunes)
Secure Issuance	
FARGO and Asure ID	HID Global Web Site 'Drivers and Downloads' section ⁴
FARGO and Asure ID SDK	Developer Center ²
IAM Solutions	
ActivID	Direct End Users: http://portal.actividentity.com ⁵ Distributors, OEMs, Integrators: http://partnerportal.hidglobal.com ⁵
ActivID Mobile Apps (including HID Approve)	New versions of the App which resides on a mobile device can be updated by using the standard procedures offered by Android and iOS (e.g. Google Play Store or iTunes)
OMNIKEY	HID Global Web Site 'Drivers and Downloads' section ⁴ (including Keyboard Wedge)
Embedded Solutions	
OMNIKEY 5x27CK, UART SE Readers and Module, SE Processor	Developer Center ²

¹ Files are downloaded from a link provided by the Technical Support.

² The developer center is found at <http://www.hidglobal.com/developer-center/>

³ Software and drivers are downloaded using the URL and login credentials provided upon purchase. It is possible to check if a new version of the software is available within the Codebench software.

⁴ The Drivers and Downloads section can be found at <http://www.hidglobal.com/drivers>. Asure ID software also has a built-in auto-notification of update feature.

⁵ The ActivID Direct End User Portal also allows customers to modify their alert subscriptions for: Hotfix Notifications, New Release Notifications, Security Alerts, and General Notifications (e.g. Technical Bulletin).

5.5 End of Life

The End-Of-Life (EOL) policy varies depending on the HID product area. The EOL status of certain products can be found online:

<https://www.hidglobal.com/product-support-life-cycle>

For other products contact Technical Support for End-Of-Life information.

5.5.1 Embedded Solutions EOL

The EOL for embedded solutions products is managed through direct contact notifications with the embedded OEMs that have embedded the HID technology/product within their systems.

6 Support Procurement and Renewal Process

6.1 Overview

This section applies to Standard and Premium Support only – not Free or Custom Technical Support.

Normally, Standard or Premium Support is purchased at the time of initial product purchase and renewed annually. Support includes the ability to contact HID Technical Support and the provisioning of Maintenance. This section covers the particulars of Support procurement and renewal.

Note: For the ActivID Authentication Managed Service, Support is not procured separately. See *Appendix A: Managed Services* for more information on the ActivID Authentication Managed Service.

6.2 Initial Procurement

6.2.1 ActivID

HID highly recommends that customers purchase Technical Support at the time of initial software license purchase. The effective start date of the support subscription is the software delivery date. The start date is called out in the “proof of support” purchase document that is issued by HID after receiving the purchase order. The “proof of support” will contain information identifying the End User, the software under support, the support period of performance, and other details of the support purchased.

If support is not purchased with the software license, and support is desired at a later date, then the customer must purchase support with a support subscription start date of the original product purchase with the same one year expiration date, as well as an administrative fee of 15% of the list price.

Please note that direct end customers can only purchase Premium Support, while Distributors and Integrators can resell both Standard as well as Premium Support.

6.2.2 pivCLASS

The initial year of Maintenance and Support for pivCLASS is mandatory. The effective start date of the software support subscription is the date that the software license is downloaded. The effective start date of pivCLASS Authentication Module (PAM) purchase is the date of shipment from HID Global.

6.3 Renewal

Upon the expiration of the initial support period, support can be renewed for successive periods, which generally consist of additional one-year periods, or, for ActivID products, also multi-year periods.

ActivID products and licenses are co-terminated and pro-rated at the time of renewal. The renewal date for future renewals is to be agreed upon with the direct customer and/or authorized channel partner as well as their renewal account manager.

Either party may cancel the support subscription during any subsequent renewal period upon advance written notice (registered or electronic mail) of at least three (3) months prior to the anniversary date. Should the direct customer or authorized channel partner decide to cancel the support subscription, HID will not refund or credit the remaining service fees. Customers who have cancelled or are otherwise not current on their Support subscription will not be able to receive Technical Support or receive product Maintenance.

Support can be renewed only for an HID product that is not End of Life. See *Section 5.5: End of Life*.

6.3.1 Reinstatement Fees and Termination

If a customer lets the support renewal lapse, yet pays within a three month period, then a reinstatement fee of 5% of the price of support for the lapsed period will be applied, and the renewed subscription will begin at the end of the previous subscription. If the lapse exceeds the three month period, then a 15% reinstatement fee of the price of support for the lapsed period will be applied, and the renewed subscription will begin at the end of the previous subscription. Normal support fees for the lapsed period apply.

Example: The yearly support fee of \$10,000 expires on March 31 and is allowed to lapse. On July 30th, the lapsed support fee is quoted at \$10,500 (\$10,000 for the yearly renewal and \$500 is 15% of the four month period (0.15 x \$3,333)). The new expiration date is still March 31 of the following year.

Customers opting to terminate their licenses, e.g. reduce the number of users, may also do so at the end of a maintenance period. Reimbursements of support fees for past periods will not be given. If the Customer wishes to increase the number of users in the future, then the Customer must purchase new licenses and support for the additional users.

6.4 Purchasing Additional Licenses with Support (ActivID)

HID policy is that when Support and Maintenance is purchased, it must be purchased for all active ActivID licenses and not a portion or subset of those licenses. When purchasing new licenses, all past expired licenses must be renewed for the same product installation.

7 Warranty, the Return Merchandize Authorization (RMA) Process, and Special Hardware Support

7.1 Overview

Hardware Support options, Warranties, and RMA procedures vary by product. This section outlines what you need to know about hardware support.

7.2 PACS and Secure Issuance Products

7.2.1 Warranty

Readers, Credentials, Programmers, and Printers are covered by the Warranty terms found at https://www.hidglobal.com/sites/hidglobal.com/files/resource_files/current-warranty-policy.

EasyLobby products follow the Manufacturer's warranty which is generally a 1-year Warranty.

Additional Printer Warranties are available on the Partner Portal at <http://partnerportal.hidglobal.com>.

7.2.2 RMA

To initiate an RMA for a Reader, Credential, or Programmer, go to <http://www.hidglobal.com/rma> or contact an HID Global Customer Service representative.

For EasyLobby product returns, contact a Customer Service representative.

For FARGO products and Networked Controllers, contact Technical Support to initiate an RMA at <http://www.hidglobal.com/support>.

7.3 ActivID Products

7.3.1 Warranty

7.3.1.1 Warranty Period

- ActivID AS Appliance (pre-FT2011): 3 years
- ActivID AS / ActivID Appliance (FT2011 and later): 1 Year, extensible to 3 years at time of purchase
- CMS Appliance: 1 Year, extensible to 3 years at time of purchase
- Responder Appliance: 3 Years with next-day on-site warranty repair
- ActivID Tokens and Couplers: 1 year

7.3.1.2 Warranty Coverage

- Parts and Labor

7.3.2 RMA

For all ActivID products, the Customer is responsible for shipping charges when sending product back to HID. HID will cover shipping charges when returning repaired products or replacements back to the Customer; Customer is responsible for all customs formalities and import costs.

7.3.2.1 Appliances

If the HID Support representative determines an issue to be due to HID-supplied hardware, the support representative will work with the manufacturer and the customer together to resolve the issue. Depending on the manufacturer, this can involve phone and/or on-site support or shipping the appliance to a regional repair center. The customer must transfer any data from the original appliance to the replacement appliance. Any replacement unit shipped is automatically invoiced. A credit note will only be issued once the original appliance is received in good shape and in a sellable order at the return address provided by HID. Instructions for handling field-replaceable items and all RMA procedures will be provided by HID Support.

An extended warranty with on-site repair option is available. Contact your sales representative for details.

7.3.2.2 ActivID Tokens

RMAs for ActivID Tokens are issued under one of the following circumstances:

- A device has a hardware fault within the HID standard 1-year hardware warranty period, or
- A device is covered under the “Token Lifetime Replacement Program”. See *Section 7.3.2.2.1: Token Lifetime Replacement Program*.

To initiate an RMA, contact HID ActivID Technical Support. Upon receipt of your request, HID Support will provide you with an RMA Information Document that includes a troubleshooting guide as well as an RMA form to describe and identify device problems. HID will ask you if you are able to recycle by yourself the faulty devices.

Note: HID will accept to replace quantities of ActivID Tokens that are only multiple of 25 tokens (e.g. 25, 50, 75, 100 etc.).

Once you have submitted the forms back to HID Support and your request has been deemed valid, HID will assign you an RMA number. If you are not able to recycle the faulty devices, HID will provide you with detailed instructions on where and how to send your RMA shipment.

Please make sure to write the RMA number visibly on the shipping box to ensure proper processing. Upon receipt, your shipment will be tested and all tokens deemed defective will be exchanged.

Notes:

HID has sole discretion to determine whether to issue an RMA number and/or replace tokens. Hardware devices that are not found by HID to be defective will not be exchanged regardless of whether HID has issued an RMA number.

Depending on the quantity to be replaced, custom tokens may be replaced with standard tokens.

7.3.2.2.1 Token Lifetime Replacement Program

This Extended Warranty Program goes into effect after your original manufacturer's warranty (1-year) expires, giving you an extra 4-year warranty.

A device is covered by the Extended Warranty Program (5-years in total from the proof of purchase order) when it meets all of the following conditions:

- Device is one of the following:
 - ActivID Token One
 - ActivID Keychain Token
 - ActivID Pocket Token
 - ActivID Mini Token
 - ActivID Flexi Token
 - ActivID Desktop Token
- Cover defects in workmanship or materials. The Extended Warranty Program does not cover decals or damage to the token caused by: misuse abuse, vandalism, end users attempts to repair item.
- The token being replaced must be part of a deployment of less than 5,000 devices with a valid, uninterrupted support subscription for one of the following products:
 - ActivID AAA Server for Remote Access
 - ActivID Authentication Server for Enterprise
 - ActivID Authentication Appliance for Enterprise

Note: Devices with expired batteries can be returned with the exception of the ActivID Token One, as the battery compartment can be opened with a screwdriver and batteries can be changed easily.

As an indication, general lead time and availability for replacements are:

- For standard HID branded tokens, 6 to 8 weeks for products out of stock.
- Extended Warranty Program cannot and does not guarantee the availability of specific pieces in specific patterns.

7.4 Embedded Solutions Products

The embedded solutions products are only able to be issued an RMA in cases which there is a verified issue. Contact the assigned Regional and/or Head Applications Engineer with all field reports to verify the issue verified before submitting a product RMA.

Also note that embedded OEM products that are manufactured into the host product may not be able to be returned. Please ensure that adequate incoming inspection processes are in place at the manufacturer.

Appendix A: Managed Services

A.1 ActivID Authentication Managed Service

A.1.1 Service Availability

HID will use commercially reasonable efforts to make the Services available 99.90% of the time. The Service availability will be calculated by dividing the total number of minutes of uptime in the Services during an applicable calendar month and excluding Unscheduled Downtime (but including minutes of Scheduled Downtime and minutes attributable to elements outside of HID's reasonable control, including, without limitation, the failure of any third party vendors or hosting providers, the Internet in general, or any emergency or force majeure event) by the total number of actual minutes in such month, multiplied by 100 ("Scheduled Uptime").

A.1.2 Scheduled Downtime

HID will use reasonable efforts to provide Customer with a minimum of 7 days advance notice for all scheduled downtime to perform system maintenance, backup and upgrade functions for the Services (the "Scheduled Downtime") if the Services will be unavailable due to the performance of system maintenance, backup and upgrade functions. Scheduled Downtime will not exceed 8 hours per month and will be scheduled in advance during off-peak hours (based on Pacific Time). HID will notify Customer's administrator via email of any Scheduled Downtime that will exceed 2 hours.

The duration of Scheduled Downtime is measured, in minutes, as the amount of elapsed time from when the Services are not available to perform operations to when the Services become available to perform operations. Daily system logs will be used to track Scheduled Downtime and any other Service outages.

A.1.3 Unscheduled Downtime

Unscheduled Downtime is defined as any time outside of the Scheduled Downtime when the Services are not available to perform operations, but excluding any outages caused by elements outside of HID's reasonable control (including, without limitation, the failure of any third party vendors or hosting providers, the Internet in general, or any emergency or force majeure event). The measurement is in minutes.

Appendix B: HID Technical Support Holidays

B.1 US Offices Holidays

- January 2 2017 New Year's Day
- February 20 2017 President's Day
- April 14 2017 Spring Holiday
- May 29 2017 Memorial Day
- July 4 2017 Independence Day
- September 4 2017 Labor Day
- November 23 2017 Thanksgiving Day
- November 24 2017 Thanksgiving Friday
- December 25 2017 Christmas Day

B.2 Mexico Office Holidays

- January 2 2017 New Year's Day
- February 6 2017 Constitution Day
- March 20 2017 Benito Juarez Day
- May 1, 2 2017 Labor Day
- May 10 2017 Mother's Day
- September 15 2017 Independence Day
- November 20 2017 Revolution Day
- December 22 2017 Christmas Holiday
- December 25 2017 Christmas Day
- December 29 2017 New Year's Eve

B.3 Brazil Office Holidays

- January 2 2017 Confraternização Universal
- January 25 2017 Aniversario São Paulo
- February 27, 28 2017 Carnaval
- March 1 2017 Cinzas
- April 14 2017 Paixao de Christo
- April 16 2017 Páscoa
- April 21 2017 Tiradentes
- May 1 2017 Dia do Trabalhador
- June 15 2017 Corpus Christi
- July 9 2017 Revolução Constitucionalista
- September 7 2017 Independência do Brasil
- October 12 2017 Nossa Senhora Aparecida
- November 2 2017 Finados
- November 15 2017 Proclamação da República
- November 20 2017 Zumbi/Consciência Negra

- December 25 2017 Natal (Christmas)

B.4 UK Offices Holidays

- January 1 2017 New Year's Day
- April 14 2017 Good Friday
- April 17 2017 Easter Monday
- May 1 2017 Early May Bank Holiday
- May 29 2017 Spring Bank Holiday
- August 28 2017 Summer Bank Holiday
- December 25 2017 Christmas Day
- December 26 2017 Boxing Day

B.5 France Office Holidays

- January 1 2017 Jour de l'An (New Year's Day)
- April 17 2017 Lundi de Pâques (Easter Monday)
- May 1 2017 Fête du Travail (Labor Day)
- May 8 2017 Victoire 1945 (Armistice 1945)
- May 25 2017 Ascension
- July 14 2017 Fête Nationale (National Day)
- August 15 2017 Assomption
- November 1 2017 Toussaint (All Saint's Day)
- November 18 2017 Armistice 1918
- December 25 2017 Noël (Christmas)

B.6 Hong Kong Office Holidays

- January 2 2017 The day following the first day of January
- January 28-31 2017 Lunar New Year's Day
- April 4 2017 Ching Ming Festival
- April 14 2017 Good Friday
- April 17 2017 Easter Monday
- May 1 2017 Labour Day
- May 3 2017 The Birthday of the Buddha
- May 30 2017 Tuen Ng Festival
- July 1 2017 Hong Kong Special Administrative Region Establishment Day
- October 2 2017 The day following the National Day
- October 5 2017 The day following the Chinese Mid-Autumn Festival
- October 28 2017 Chung Yeung Festival
- December 25 2017 Christmas Day
- December 26 2017 Boxing Day

B.7 China Office Holidays

- January 2 2017 New Year's Day
- January 22 2017 Special Working Day
- January 27-February 2 2017 Chinese New Year Holidays
(January 22 & February 4 2017 Compensation Working Days)
- March 8 2017 International Women's Day
- April 2-4 2017 Qing Ming Jie Holidays
(April 1 2017 Compensation Working Day)
- May 1 2017 Labour Day
- May 29-30 2017 Dragon Boat Festival Holiday
(May 27 2017 Compensation Working Day)
- October 1-8 2017 National Day
- October 4 2017 Mid-Autumn Festival
(September 30 2017 Compensation Working Day)
- October 28 2017 Chung Yeung Festival

B.8 India Bangalore Office Holidays

- January 16 2017 MAKARA SANKRANTHI / PONGAL Day
- January 26 2017 Republic Day
- February 24 2017 Maha Shivaratri Day
- March 29 2017 Ugadi Day
- April 14 2017 Good Friday
- May 1 2017 May Day (Labour Day)
- June 26 2017 IDUL - FITR Day
- August 15 2017 Independence Day
- August 25 2017 Ganesh Chudurthi Day
- September 29 2017 Dusheera/Vijayadasam Day
- October 2 2017 Gandhi Jayanthi Day
- October 18 2017 Diwali (Naraka Chudurthi Day)
- November 1 2017 Kannada Rajyothsava Day
- December 25 2017 Christmas Day

