



IT Security Standard:

Web Space Usage

Introduction

This standard defines the steps needed to implement Bellevue College policy # 5250: Information Technology (IT) Security regarding the maintenance and governance of Bellevue College's presence on the Web. The standard will be reviewed on an annual basis or when changes are implemented.

Scope

This standard defines the expectations which apply to the use of Bellevue College resources to create, store and publish web pages on public Bellevue College web servers in accordance with the Bellevue College IT security standard addressing "Web Servers").

This standard is necessary to help ensure the information and services provided to students, employees and the general public through the web meet a minimum set of standards and to help assure integrity and reliability of the Bellevue College internal networks and the computers on those networks.

The guidelines in this standard will be applied when appropriate to the specialized Distance Education teaching portal (currently VISTA) and the Bellevue College Portal (currently SharePoint) maintained and monitored by Web Services, but required exceptions may be granted by the Director of Web Services.

Exceptions

A variety of exceptions to this standard may be expected. These exceptions, when granted, will be documented in either a platform specific standard or in a memo documenting the exception. Exceptions may be granted by the Bellevue College IT Security Administrator, the Dean of Information Resources (IR), or any IR director authorized by the Dean. Copies of all documentation regarding exceptions will be kept on file with the Bellevue College IT Security Administrator. This documentation will include:

1. A detailed description of the exception.
2. A description of why the exception is necessary.
3. A risk assessment by the Bellevue College IT Security Administrator and/or the Dean of Information Resources, or designee.
4. A description of the compensating controls that are in place to mitigate risk created by the exception.

Business Impact and Risk, Threat, and Vulnerability Analysis

Use of the Internet and the Web provides a direct line from anywhere in the world into the Bellevue College networks and computers attached to the networks. Appropriate IT security demands that this type of access is not allowed, but the use of the Web is such a vital part of communicating in the modern world and is such a significant part of fulfilling the educational and administrative missions of the college, whatever risks exist in the use of these resources are minor in comparison with their positive business impact.

Because a presence on the Web may be a legitimate function of any Bellevue College individual or unit, carefully articulating the Bellevue College IT security policies, standards, and expectations becomes a critical factor in assuring the security of the computing and communications resources under Bellevue

College's responsibility. Any accidental or malicious misuse of these resources could put college instructional and business systems at great risk.

Given the high level of access to internal systems that potentially exist with the use of the Internet and the Web, the most significant threats to Bellevue College include:

1. Accidental and/or maliciously-caused loss or denial of vital services
2. Accidental and/or malicious destruction or disclosure of critical Bellevue College data
3. Unauthorized access to data and/or computing processes, allowing theft, fraud or the malicious spread of misinformation
4. Outside users maliciously increasing privileges to include unauthorized access to systems
5. Malicious and/or unauthorized access to controlling components (e.g., routers, DNS, domain controllers)
6. Loss of revenue, loss of reputation and user dissatisfaction

Given the nature of the assets affected by use of the Internet and the Web, all of these risks are very significant, and could cause considerable loss and harm to Bellevue College.

Standard

A. Introduction

1. Bellevue College recognizes the importance for campus entities to present public information on the Web. The college also has a vested interest in maintaining a positive reputation and image by providing a viable, professional, and uniform presence on the Web.
2. This standard establishes consistent procedures, processes, and guidelines for units, organizations, and individuals to use when publishing information on the Internet.
3. At Bellevue College, computing resources are available to faculty, staff, and students in direct support of academic and Bellevue College business purposes. With the opportunity to use these resources comes the responsibility to adhere to all guidelines and procedures established by the college and other government entities.
4. Any group or individual granted authorization to publish content on the Web has the responsibility to be a conscientious citizen and consider the sensitivity of Bellevue College's standing in the community and as a representative of the state.
5. Information Resources (IR) supports college entities with resources needed to publish electronic information to Bellevue College's internal and public communities via the Internet and the Web. The following types of websites may be requested:
 - a. **Official Website** – Websites containing any official content or information representing Bellevue College, its divisions, departments, programs or activities.
 - b. **Affiliate Organization Website** – Websites supporting a group or activity sponsored in part by Bellevue College. Requests for these sites are evaluated on an individual basis to determine appropriateness and compliance with all college standards and policies.
 - c. **Personal Website** – Websites containing personal information, opinions or materials representing an individual (not the college).
 - d. **Student Organization Website** – Websites supporting a student club, organization, or activity. (Governed by Bellevue College Policy #5200: "*Student Network Web Space Usage*")
6. The Bellevue College website, <http://bellevuecollege.edu/> is not hosted by the Washington state Department of Information Services (DIS) and is used for general information only. No confidential information is posted on the website and confidential data cannot be accessed through the website.

7. Bellevue College does not have Internet-based applications within the Washington State Digital Government Framework. If Bellevue College determines that it would be feasible and cost-effective to implement web-based applications within the Washington State Digital Government Framework, all rules, standards and guidelines as prescribed by DIS/ISB will be followed and the DIS Senior Technology Management Consult will be contacted.

B. Usage Guidelines

1. Units, organizations and individuals who wish to manage a website on behalf of their group are expected to abide by the following general usage guidelines:
 - a. The sponsoring unit, organization or individual must have a website manager who will take sole responsibility for managing the content and file directories of the website.
2. Any individual requesting assignment as a website manager must first have an active Bellevue College network login account.
3. Website managers will maintain their websites and directories adhering to all established college policies and standards including, but not limited to, Bellevue College policies:
 - a. #4400: "Acceptable Use of State Resources"
 - b. #5150: "Acceptable Use of Bellevue College Networks and Systems"
 - c. #5450: "Web Advertisements or Sponsorships"; and
 - d. Bellevue College IT Security Standard: "Web Information Accessibility"
4. Bellevue College units and staff will not knowingly provide information or services contrary to policies or procedures established by federal or state law, by the Board of Trustees, or by Bellevue College.
5. Website managers will be responsible for ensuring that all pages and files stored on Bellevue College Web servers contain only information that is current and appropriate for public access.
6. Use of Web pages for illegal, commercial, or solely personal purposes is prohibited.
7. All website managers are responsible for keeping back-up copies of the pages for which they are responsible.
8. The IR department is responsible for maintaining the quality and integrity of the college's overall Web presence which includes setting website and page standards, updating Bellevue College website page content, and managing Bellevue College Web servers (see the IT security standard addressing "Web Servers" for more information). Specifically, the Web Services office oversees the integrity and accuracy of all public content and the overall look and feel of the official Bellevue College website (<http://bellevuecollege.edu>).

C. Content Requirements

1. Specific content requirements for each type of website has been established to assure that public information is accurate, easy to navigate, presents a clear identity (look and feel) belonging to Bellevue College, and provides clear contact information for site visitors. All website managers are expected to maintain pages that comply with the following standards:
 - a. **Official Websites**
 - i. The following elements must appear on the home page:
 1. College name and logo (following current logo guidelines for web pages).
 2. A link to the Bellevue College home page (<http://bellevuecollege.edu>)
 3. The name of the website stated clearly.
 4. Contact information for the website manager or a clearly visible link leading the site visitor to the website manager contact information.

5. The date when the website was last updated or revised.
- ii. The following element must be included in all pages:
 1. A clear page title (HTML Title tag) that identifies the web page and the name of the college. *For example: "Business Division, Bellevue College" or "Contact the Business Division - Bellevue College"*
- iii. All pages and files stored in web server folders must provide current and/or accurate information.
- iv. Pages may not contain commercial sponsorships or advertisements unless approved by the Vice President of Administrative Services (see Bellevue College Policy #5450: "*Web Advertisements or Sponsorships*").
- v. Pages may not contain degree requirements or course descriptions on their website without prior approval from the Curriculum Information Management (CIM) Subcommittee or the Executive Dean of Instruction or his/her designee.
 1. Website managers wishing to provide program requirements can link to program requirements located in the Online Course Catalog at: <http://bellevuecollege.edu/catalog/> or in the Degree & Certificate Completion Worksheets website at: <http://bellevuecollege.edu/worksheets/>.

b. Affiliate Organization Websites

- i. The following information will appear on the home page of all affiliate websites:
 1. A link to the Bellevue College home page (<http://bellevuecollege.edu>).
 2. The name (clearly identified) of the website.
 3. The contact information for the website manager or a clear link to the persons' contact information.
 4. The date when the website was last updated or revised.
 5. A statement explaining affiliation with Bellevue College and purpose of the organization. *For example, "[Organization name] is co-sponsored by Bellevue College, and is partially funded by [list other sponsors]."*
- ii. A Bellevue College logo may appear on an affiliate organization website, but is not required. The Bellevue College logo must be used appropriately.
- iii. Pages may not contain commercial sponsorships or advertisements unless approved by the Vice President of Administrative Services (see Bellevue College Policy #5450: "*Web Advertisements or Sponsorships*").

c. Personal Websites

- i. The following information must appear on the home page of all personal websites:
 1. A link to the Bellevue College home page (<http://bellevuecollege.edu>).
 2. The name and e-mail address of the page owner.
 3. The date the website was last updated or revised.
 4. A content disclaimer explaining the website does not represent the views of the college. *For example, "This is a personal website and does not necessarily reflect the opinions or views of Bellevue College."*
- ii. Personal websites will not contain the Bellevue College logo or other symbols or marks of the college.

- iii. Individuals are required to comply with relevant Bellevue College policies, state and federal law, and any relevant licensing agreements relating to intellectual property.
- iv. Pages may not contain commercial sponsorships or advertisements unless approved by the Vice President of Administrative Services (see Bellevue College Policy #5450: "Web Advertisements or Sponsorships").

d. Student Organization Websites

- i. The following required elements must appear on the home page of all student club websites:
 - 1. The name of the student club.
 - 2. The name and e-mail address of the student website manager.
 - 3. The name and Bellevue College e-mail of the club's faculty advisor.
 - 4. A content disclaimer explaining the website does not represent the views of the college. For example, "*This is a Bellevue College student [club or organization] website and does not necessarily reflect the opinions or views of Bellevue College.*"
- ii. Student Club websites will not contain the Bellevue College logo or other symbols or marks of the college.

e. Streaming Audio/Video

- i. If an individual needs to post streaming audio or video on an approved Bellevue College website the capability of doing so will be requested using the RealServer Video/Audio Streaming Website Request Form.

D. Copyright Compliance

- 1. Material accessed from the Bellevue College website is in essence "published" on the Internet and can be read from thousands of terminals. Website managers will ensure compliance with all current copyright rules and regulations. All use of copyrighted material will be in compliance with Bellevue College Policy #3600: "Copyright and the Right of Fair Use." Before posting any information on a Bellevue College website, the website manager will:
 - a. Obtain written permission from the copyright holder to display text or graphics, or provide access to software that is owned by someone else.
 - b. Identify any copyrighted materials (including those held by internal Bellevue College persons or entities) by displaying the word "Copyright," the copyright symbol (c), the year, and the name of the copyright holder on the document.
 - c. The Bellevue College logo is a registered trademark and is available for use on official websites only.

E. Technical Requirements

- 1. Technical requirements for Bellevue College web pages have been established to ensure that all site visitors to any Bellevue College website will have access to all materials and information without obstacles, and that a consistent user experience will be enjoyed wherever the user moves within the Bellevue College site.
 - a. **Browser Supportability**
 - i. All official websites must comply with minimum browser supportability standards. Specifically, all websites should be tested and be fully functional through the following commonly used Internet browsers:
 - 1. Firefox 1.5 and newer
 - 2. Internet Explorer 6 and newer (Windows only)

3. Netscape 7 and newer
4. Safari 1 and newer (Macintosh only)

It is strongly recommended that all websites be tested with other browsers such as:

1. Opera
2. IE 5.5 (Windows only)
3. IE 5.0 (Windows only)
4. Firefox 1
5. Netscape 6

b. Default Page File Names

- i. The home page of all college websites must use one of Bellevue College's supported default file names for the home page to load correctly without specifying a file name. If a web page does not use one of these supported file names on the default page, and no specific file name is specified in the web address, the website visitor will receive a "Directory Listing Denied" error when they attempt to load the web page.
- ii. The supported default file names are the following:
 1. default.asp
 2. default.aspx
 3. default.htm
 4. default.html
 5. index.htm
 6. index.html

c. Graphics and Multimedia

- i. Graphics and multimedia, such as audio and video, can add great value to websites. Graphics, audio and video content must be compressed before posting on a website. For more information on adding graphics, audio and video on your website, refer to the Web Publishing Guide at:
<http://bellevuecollege.edu/webpublishing/>
- ii. **Graphics**
 1. All graphics must be compressed into a GIF or JPG format. The PNG format is acceptable, but must be tested on all supported browsers to make sure graphics appear correctly.
 2. All graphics must be displayed at their actual pixel size on websites.
 3. All graphics displayed on web pages must have alternative text attributes.
- iii. **Multimedia**
 1. Multimedia must be compressed to a format that is appropriate for the audience accessing it.
 2. All multimedia must be accompanied by text descriptions.
 3. All audio must be accompanied by transcripts.
 4. Text descriptions of time-sensitive multimedia presentations, such as video must be synchronized to the presentation.

5. A link to the plug-in or applet required for experiencing the multimedia presentation must be provided.

d. Internet Markup Language

- i. Bellevue College adheres to using Extensible Hypertext Markup Language (XHTML) 1.0 for creating new web-based services including web-based applications and websites. Alternately, Hypertext Markup Language (HTML) 4.01 may be used depending on business needs, but is not recommended for new web-based applications.
- ii. The language declaration should be stated on the top of all web pages using the Document Type Declaration (DOCTYPE).
 1. Example of DOCTYPE for XHTML 1.0:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```
 2. Example of DOCTYPE for HTML 4.01:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
```

F. Information Accessibility

1. In response to the need to ensure equal access to electronic and information technologies, all websites that are sponsored by, affiliated with, and which represent Bellevue College will comply with all requirements outlined in the Bellevue College IT security standard addressing "Web Information Accessibility."

G. Screen Resolution

1. All public website and page designs should be designed for optimal viewing using the screen resolution of 800x600 pixels so as to not require horizontal scrolling.

H. Server-Side Programming

1. Bellevue College web servers support the following server technologies:
 - a. ASP.NET
 - b. VB.NET
 - c. C#
 - d. ASP
 - e. Microsoft SQL Server
 - f. SSL
2. In order to maintain integrity and security of all websites and the web server, all content managers modifying any type of server-side scripting should consult with and comply with the Bellevue College IT security standard addressing "Application Development."

I. Website Address or Uniform Resource Locator (URL)

1. The Bellevue College web address, or Uniform Resource Locator (URL), is the address that specifies the location of a file on the Internet. Bellevue College websites will be assigned a web URL using the following naming conventions:
 - a. Bellevue College website home page URL is <http://bellevuecollege.edu>.
 - b. Official websites will use the URL format: <http://bellevuecollege.edu/{sitename}/>.
 - c. Personal websites will use the URL format: <http://facweb.bcc.ctc.edu/{username}/>.

- d. Student Organization websites will use the URL format:
<http://student.bellevuecollege.edu/{sitename}/>
2. No other URL format will be assigned without prior written approval from the Bellevue College IT Security Administrator and/or the Dean of Information Resources, or authorized designee, and the appropriate Organizational Unit Administrator (OUA). All new domain names must be approved by the Bellevue College Director of Marketing.
3. Bellevue College websites in existence at the time this standard was adopted which follow previous Bellevue College URL naming conventions that are not compliant with this current requirement may continue to use the existing URL until such a time as the website is updated to conform. Website managers will work with Web Services personnel to make these changes as sites are updated.

J. Procedures

1. The procedures below must be followed as they apply to the specific site or type of site being posted.
2. **Approval of New Websites**
 - a. All new websites must be reviewed for content and technical compliance before they will be approved.
 - b. When a new website is ready to be posted, the administrator for that unit or individual will review the material for the website.
 - c. The individual designated as the website manager will submit a Website Access Request Form with the required signatures.
 - d. When the request form is received by Information Resources, a review session with Web Services staff will be set up with the requestor.
 - e. Web Services will review the website to verify the website is in compliance with all applicable policies and standards before granting server access.
 - f. Once approved, the website manager will be contacted with server access information and may then post and advertise the new website.
 - g. It is the responsibility of the website manager to contact the Web Services department to request a featured link and cross-referencing to the new site on the Bellevue College website.
 - h. **Exceptions**
 - i. Any exceptions to this website approval and request procedures must be approved by the Dean of Information Resources, a Web Services staff person, or appropriate designee.
 - ii. Personal websites will not be reviewed before they will be approved.
 - iii. Websites for student organizations follow the approval procedures articulated in Bellevue College Policy #5200: "Academic Network Web Space Usage."
3. **Requests for Web Space Access**
 - a. When a Bellevue College employee wishes to seek privileges to an existing website directory a Website Access Request Form with the required signatures should be submitted.
4. **Requests for Web Space Access by an Individual Not Employed by Bellevue College**
 - a. For various reasons, students and other individuals not employed by the college may require web server access on the Administrative Web server. Bellevue College employees will request that a Web server account be created for any Bellevue College student or other individual who meets at least one of the following criteria:

- i. The individual is developing a Web-based project that requires testing with components installed on the campus server (i.e., they cannot test or develop the project offline) which supports the business of the college.
 - ii. The individual is employed or recruited to assist a Bellevue College department, program or organization with regular on-going maintenance of an official Bellevue College website.
 - 1. On-going site maintenance refers to making routine content changes and updating graphics and/or page formatting on a regular basis.
 - 2. An official Bellevue College website is defined as a site that represents a college department, office, or online service. This does not include student clubs, organizations, or personal pages.
 - iii. The student is enrolled in an internship or class which necessitates access to the server to fulfill a component of the curriculum or internship work.
 - iv. The individual has been hired or recruited by the college to consult, conduct research, or evaluate the business of the college which necessitates access to the server to accomplish the work.
- b. Because access to be able to maintain Bellevue College websites is secured by login, all procedures for requesting a Bellevue College network login account for the individual will be followed prior to submitting a request for access to a website. These procedures and required forms can be found in Bellevue College Policy #5150: "Acceptable Use of Bellevue College Networks and Systems."
- c. The employee who will serve as the direct supervisor of the individual's work must submit the request on behalf of the individual. Student or non-college employees will not submit a request on their own behalf.
- d. Creation of a Web server account for a student or a non-college employee will be considered carefully. Approval and oversight of these accounts will be left to the discretion of the employee submitting the request and will only be requested if deemed necessary. The request process requires that the employee determine the appropriate length of time the account will remain active.
- i. Server accounts will not be issued to individuals who require short-term access to the server (for example, to upload a new site to the server), unless required by the internship or class.
 - ii. Arrangements will be made with Web Services to review the site, to transfer the site files to the server, or for assistance with publishing student-developed websites.
- e. **Procedure**
- i. To request a Web server account for a student or non-college employee, the sponsoring Bellevue College employee will:
 - 1. Complete the Website Access Request Form.
 - 2. Give the individual a copy of the Bellevue College policy #5000, Acceptable Use of Bellevue College Computers, policy #5150, Acceptable Use of Bellevue College Networks and Systems, and the request form to read and sign.
 - 3. Gather the additional required signatures from the originating department after the individual has signed the form.
 - 4. Submit the completed form to the Bellevue College Website Specialist in Web Services for final approval signatures. The form will be routed and processed through Computing Services and stored by the IT Security Administrator.

- ii. The employee submitting the request and the account owner will be notified via e-mail when the server account has been created. The account expiration date will be confirmed in this e-mail.

f. Responsibilities of the Employee Requesting the Account

- i. The Bellevue College employee requesting the Web server account will:
 - 1. Be responsible for requesting that access to the web server be terminated or renewed
 - 2. Provide the individual with a written job description outlining in as much detail as possible the daily and ongoing tasks assigned to them in conjunction with their assigned work.
 - 3. Apply reasonable diligence in monitoring the activity for appropriateness.
 - 4. Address inappropriate activity in a timely manner.

f. Renewing an Account

- i. The account will automatically expire on the Access Expiration Date indicated on the request form. If there is a need to renew an existing account, the employee sponsor will notify Web Services by sending an e-mail to webmaster@bellevuecollege.edu indicating the desired extended date.

5. Termination of Web Space Access

- a. When an individual should no longer have privileges to a website directory, it is the responsibility of that organizational unit's administrator to notify the Web Services department by sending an e-mail to webmaster@bellevuecollege.edu. If the individual is not employed by the college, then the individual's sponsoring employee should notify the Web Services department.

K. Monitoring and Remedies

- 1. Web Services will monitor web pages housed on Bellevue College web servers for appropriate use of resources and appropriateness of information displayed. Violations of any Bellevue College policies or IT security standards will be reported to the Bellevue College IT Security Administrator and/or the Dean of Information Resources, or authorized designee.
- 2. Responsibility for the maintenance of an established website must be delegated by the Budget Authority approving initial creation of the site to a new website manager in the event an individual assigned as a website manager separates from the college. The Budget Authority must contact Web Services to notify them of any such changes.
- 3. Website managers will be notified by Web Services of any areas of non-compliance and they will have the opportunity to fix or remove the content.
 - a. If, after being allowed a reasonable time for correction the material remains posted, the Bellevue College IT Security Administrator and/or the Dean of Information Resources, or authorized designee will order the site be shut down pending further investigation or corrective action.
 - b. After consultation with the President's Staff and/or Educational Services Cabinet, as appropriate, the site and its content will be subject to immediate removal. The server privileges granted to the website manager will be also be immediately revoked.
 - c. Repeated postings of such information by the same individual will result in loss of privileges to post any information or sites to Bellevue College's web server.
- 4. Web server privileges are considered administrative privileges, as described in the Bellevue College IT security standard addressing "Security Privileges." Like administrative privileges, web server access and privileges will be revoked, without warning, if it appears there has been a deliberate attempt by the user to elevate privileges, or to utilize privileges to gain access to Bellevue College networks or systems to which authorization has not been given.

5. Any suspected breach of security will immediately be reported to the Bellevue College IT Security Administrator and/or the Dean of Information Resources or an authorized designee, and to an appropriate unit administrator responsible for the Website. The procedures described under "Remedies" in the Bellevue College IT security standard addressing "Security Privileges" will be followed, if applicable.

L. Definitions

1. **Website:** an entire collection of web pages that are arranged on the World Wide Web under a common address.
2. **Web page:** A single page made available through a website.
3. **Home page:** The web page designated to be the main entry point to a website.
4. **Website manager:** Person responsible for maintaining the content and integrity of a website.
5. **Web server:** A computer that hosts the websites in a way that they can be accessed through the internet.
6. **Bellevue College Website** - The collection of all official and personal websites
7. **Bellevue College home page** – The first page of the Bellevue College website and is located at <http://bellevuecollege.edu/>
8. **College website** - The college website includes the Bellevue College home page and all other pages that share its design and navigation system.
9. **Official website** - An official website is intended to officially represent any portion of Bellevue College. Official websites include but are not limited to department, division and program websites.
10. **Affiliate organization website** - An affiliate organization website is a website managed for a group that is co-sponsored by Bellevue College in some way and may have additional sponsorships with other entities.
11. **Personal website** - A personal website is intended to reflect the individual that owns the site, not Bellevue College.

Appendix A – References

1. Bellevue College Policy #3600: *Copyright and the Right of Fair Use*
2. Bellevue College Policy #4400: *Acceptable Use of State Resources*
3. Bellevue College Policy #5150: *Acceptable Use of Bellevue College Networks and Systems*
4. Bellevue College Policy #5200: *Student Network Web Space Usage*
5. Bellevue College Policy #5450: *Web Advertisements or Sponsorships*
6. Bellevue College IT Security Standard: *Application Development*
7. Bellevue College IT Security Standard: *Security Privileges*
8. Bellevue College IT Security Standard: *Web Servers*
9. Bellevue College IT Security Standard: *Web Information Accessibility*
10. U.S. Access Board Web Accessibility Standards <http://www.access-board.gov>

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